

THE INLAND PRINTER

Volume 81 Number 2

MAY, 1928

What Constitutes a Lottery?

By ROBERT W. JONES

Associate Professor of Journalism, University of Washington

I KNOW there are federal and state regulations that make advertising a lottery a punishable offense, but is *this* a lottery?" The speaker was the owner of a daily newspaper. A merchant had sent in copy for a half-page advertisement announcing that on a certain date he would give every visitor to his store a free ticket, and would then hold a drawing for a radio set. Nobody paid anything for the ticket; nobody had to buy anything to be given a ticket.

But that's a lottery. "Payment" for a lottery ticket refers to any consideration, and here the consideration is that the individual who gets the ticket presents himself at the store, thereby meeting the merchant's conditions, and is given a ticket for his attendance. That makes the drawing a lottery.

But a difference exists between the example just given and that of a moving-picture theater which held a "country store," giving away at the box office the numbers that were later to be drawn inside the theater to determine the winners. Here the tickets were given away to the public, whether an admission ticket to the theater was purchased or not, and the numbers were given to any applicant whether the applicant proposed to go inside the theater or not.

Is this a lottery? It is, and the courts have so held on the theory that the number or ticket, good when the drawing is held, is valueless to the recip-

HAVE you ever innocently become entangled with lottery laws—found your expensive mailings rejected by the postal authorities? Then you know some of the accompanying facts, through costly experience. But why pay so dearly for knowledge that is yours without expense? For a simple, clean-cut analysis of a difficult legal subject, with tangible cases which show the actual application of these state and federal regulations against lotteries, you need not look beyond this concise discussion by Professor Jones. Far-sighted printers can not afford to disregard the facts contained in this discussion.

ient unless he enters the theater and is present, in person or by proxy, to stand up and claim the prize or award if his number is called. That puts this case on all fours with the preceding one.

Even the Ladies' Aid Society

A charity affair is held by the Ladies' Aid Society, and every person who attends the charity affair is given a number or a "chance" and a drawing is held for a quilt, a piece of fancy work, or a souvenir that could be sold by the one who wins it for only a few cents at best.

Is this a lottery? Yes, because the attendance of the individual furnishes the consideration for

the number given. Of course, there is hardly a prosecuting attorney so hard-boiled or so earnest in his drive to "enforce all the laws" that he will proceed against the ladies who stage this rather innocent lottery. But this doesn't make it lawful; this merely means that, so far as lotteries held by the Ladies' Aid Society are concerned, the laws are not enforced by the authorities.

Suppose, now, that the publisher of the *Homeburg Citizen* decides to hold a circulation contest. Three grand prizes are offered, ranging from a \$1,000 car to a \$400 radio set. The individuals receiving the most "votes" get the prizes. The contestants get subscribers for the paper and are credited with a given number of "votes" for each subscription paid into the newspaper's hands on

or before the date when the contest closes. From time to time a glowing account of the progress of the contest is published in the *Citizen's* columns. Finally the prizes are awarded.

The Element of Merit

Is this a lottery? No, it is a contest, for the prizes are awarded *on a basis of merit*, namely, the degree of success met with by the contestants in turning in subscriptions. The element of chance is lacking.

Suppose that A, B, and C, contestants, have worked diligently and have submitted their subscription totals, and that D, waiting till the eleventh hour, sees that by turning in about \$800 in cash and giving 400 names of "subscribers" to the editor he, D, can win the \$1,000 car. He gets a series of telephone and rural-route directories from various sections of the county and compiles a list of 401 names and turns in \$802 (the odd two dollars being to prevent some one else winning who turns in an even number) and, as a result, D gets the \$1,000 car.

Evasion Does Not Affect Status of Contest

Is this enough to alter the matter? No. The conditions laid down make it a contest instead of a lottery, and the fact that D has not obeyed the rules but has succeeded in evading them will have no effect on the status of the contest.

Publication of a news account of a lottery drawing is contrary to the law, either before or after the event. One Seattle newspaper had to make over and reprint its mail edition because it carried a news story of a lottery drawing held thousands of miles away, and this despite the fact that the newspaper was telling about the lottery *after* the drawing had been held. The reason for this rule is that to allow news to be published about a lottery opens the door to surreptitious advertising of a lottery, and publication after one drawing would, quite naturally, serve to attract attention to the lottery and to its next drawing.

These Constitute a Lottery

These are the essential features of a lottery:

1. The drawing or the award must be by chance and not by merit.
2. The chances or tickets must be purchased, or secured upon some consideration, by the ticket or chance holder.
3. A prize must be awarded.

The examples already given tell what may constitute a drawing. The method of drawing makes no difference, provided a drawing is held or an award made by chance.

As to the purchase of a ticket, anything that has been done or undertaken or foregone by the ticket holder will constitute a purchase or chance for a consideration and thus violate the regulations.

As to the prize, it may be any object of value. To draw for a merchandise slip, for example, would be drawing for a valuable prize.

The prosecuting attorney in your community is the individual who will take action in case he believes a lottery is being held, and it would be an excellent thing to go to him, lay the facts before him, and find out what he holds to be a lottery before going ahead with an advertising idea that is in any way near the line. If the prosecutor proceeds against you, whether you "beat the case" or not, you will be put to inconvenience and expense and the general public will never be quite clear as to your guilt or innocence.

Look Out for the Post Office Department

Of course, the postal regulations will apply regardless of the local prosecutor's opinion. Undoubtedly many a newspaper goes through the mails carrying references to what could be technically ruled to be a lottery. The chamber of commerce, a fraternal organization, or a church or social group of some kind stages a carnival, and often there are games of chance that violate the gambling statutes and drawings that are within the scope of the regulations applying to lotteries. No steps are taken by the authorities.

Why? Because the authorities are so allied with these groups that they do not act. Perhaps the newspaper carries a big account of the affair with names of the winners, and is not excluded from the mails or otherwise interfered with. That doesn't affect the status of the matter; the officials involved simply have not enforced the law.

And Ask Your Lawyer, Too

When in doubt as to whether a plan is a lottery or not, apply the three tests suggested, and if these do not classify the project, see your attorney, and follow his advice in the matter.

The number of violations of the law through innocent misinformation or ignorance is decreasing. The existence of laws governing merchandising and advertising schemes that involve the lottery idea can be fairly said to be almost universal.

Of course, ignorance of the lottery law excuses nobody. It is here quite true that if a violator has proceeded on the theory that his scheme is not a violation of the law, he is left without a leg to stand on if his view of the law is incorrect.

The tendency is to tighten the regulations and to enforce them more completely. It is a matter of common knowledge that can be established from your own experience that the lottery advertising scheme is less common and is more generally frowned on than formerly. Here is a law in which the public believes, and the wise business man accepts it in spirit as well as in letter.

The Protection of Type Faces

By WALDON FAWCETT

EVENTS are conspiring to redirect the attention of workers in the printing and allied industries to the question of the protectability of original ideas. One circumstance is foremost among the influences that render timely this issue in its broadest form: the congress of the United States has before it a program of revision that contemplates the modernization of the nation's copyright law, the trade-mark statutes, and the federal system which renders ornamental designs that disclose the quality of invention eligible for the grant of a patent right.

The agitation before the national legislature, which has been inspired principally by the American Bar Association, is born in part of a realization that the United States is in some respects out of step with other leading nations of the world in the safeguards provided against imitation or misappropriation of industrial property. In even greater measure it comes of belated recognition that, with the progress of the arts and the growth of commercial competition, the old agencies for the certification of property rights in intangible assets no longer suffice. In many fields of endeavor, and most conspicuously in the art industries such as printing, the highest desire of the creator or pioneer is to obtain the maximum monopoly of the idea he has originated or adapted rather than to rest content with an equity in a particular expression of it.

More Elastic Protection Needed

For the prospective reforms in the law, by which all branches of the graphic arts will benefit, various species of unrest are responsible. Most pressing, however, has been the dissatisfaction with the protection available to type fonts or type faces. Here the limitations of existing arrangements are but symptomatic of conditions elsewhere in the realm of the art preservative. But as ambitious producers have devoted increased expenditures of time and money to the evolution of unique type faces, they have grown increasingly keen for a more elastic form of protection than the patent system which to date has offered the only shelter for type faces, ornaments, etc.

TODAY any new type face for which legal protection is sought must contain that sufficient element or amount of novelty to make it an "invention." Originality and a freshness of form are not enough, although they serve the primary need for which the face was created. Congress is now considering legislation intended to improve upon the copyright law, the trade-mark statutes, and also the federal system of patent grants. This program reasonably advocates legal protection of new type faces and other such material under the copyright law. Mr. Fawcett's analysis of the situation is competent and forceful.

Given this incentive, we find type designers and typefounders in the forefront of the current movement at Washington which seeks to persuade congress to remove the ornamental designs of industry from the jurisdiction of the patent system and make provision for this class of entries under the copyright system.

There is evidence to support the indictment that the United States patent system is not a suitable shelter for typographical innovations, and that it has failed of its purpose to encourage originality in the graphic arts. Fault lies chiefly in the qualifications which govern admission to the patent fold. As matters stand, a

nominated design, in order to obtain a patent grant, must constitute within the meaning of the law an "invention." Mere originality in shape, pattern, or ornamentation will not serve. No more will freshness of form. The eligible design must be characterized by a novelty that exemplifies some degree of genius on the part of the originator.

Design Must Constitute an "Invention"

Opposed to the rigid exactions of the above definition is the conception which congress is now asked to dignify in law, and which visualizes an original design as a work of either intellectual or artistic authorship and accounts the author or designer entitled to protection for his composition under the copyright law. Acceptance of this single standard would put an end to the present contradictory condition wherein an illustrator is granted, without question, a copyright on his individualistic portrayal of a subject old in the arts, while the typographical designer must prove that his work embodies invention in order to win equivalent protection for a font of type or any similar vehicle.

Since the mounting controversy of the past few years with respect to the patentability of type faces has been so largely responsible for the current movement to remodel the whole federal system of design supervision, it has taken on exceptional importance. In no field of industry, indeed, has there been so incisive a demonstration on the part of the censors of the United States patent office in laying of the boundary between design

invention and design authorship. These censors, or expert examiners, have made their appraisals incidental to "searches" for anticipation of the characteristic elements of submitted designs.

Difficulties in Patenting Type Faces

Oswald Cooper and other designers of types have had the experience of undergoing challenge at the United States patent office because, in the estimation of the authorities, the general appearance of a nominated type design differed from the prior art only in minor details. In some test cases the principle has been established in the higher federal courts that a type design may be arresting and hence desirable for advertising purposes, yet may be lacking in the esthetic appeal necessary to sustain a monopoly of use. To countenance governmental recognition, type must have been designed ostensibly as a thing of beauty rather than for any purpose of advertising utility.

Delicate points involved in the status of type faces have been at issue in contests waged now and again in connection with Caslon Bold type. Here the dominating question was whether the production of this type involved the exercise of the inventive faculty or was merely the product of such mechanical skill as would be expected of those skilled in the art of typefounding. One federal arbiter declared that there was no doubt in his mind that this type was ornamental in the sense in which that term must be applied to type faces. It seemed indisputable from evidence gathered in the printing industry that this designer of type had evolved a new and useful design and that the production of it involved the exercise of inventive faculties.

The esthetic value of a new font of type, according to federal referees, is in a great measure dependent upon the harmonious effect produced upon the eye of the observer by the predominant characteristics of the font. This concept recognizes the fact that there must of necessity be a general resemblance between each successive fresh design and the prior art, since the general outline of the letters of the alphabet is fixed. So long, however, as there are differences in a type design which place it apart from predecessors, not merely in individual letters but as an entirety from other fonts, the disposition is to grant a patent.

If it were not for the spirited rivalry for new effects in typography the old measures of invention might not have been outgrown. It was inevitable, though, that with the multiplication of type faces new complications should arise in the problem of determining when the differences between fonts outweigh the similarities. The difficulty of splitting hairs in determination of when invention is present is responsible for what has appeared lat-

terly as a sterner attitude at the federal clearing house for inventions. The new spirit found expression not long since in comment by the counsel at the patent office to the effect that since black-face type has come into extensive use in advertising so many styles have been placed on the market that "there is practically no room for invention."

Logical and Simplified Protection Sought

Transfer to the copyright structure of the typographical elements now subject to patent would place the determination of designers' rights upon an entirely new basis. The government would not attempt to adjudicate claims in any particular. All that would be done would be to officially record and certify the designer's claim. In the event of a conflict of interest the design owner would seek redress in the United States courts. It would rest with federal judges to determine to what extent presumption of piracy was to be assumed.

Simplification of design protection, no less than technical relaxation for typographical candidates which are original without being novel, is sought in the program before congress. Under the present law, any printer or printer's customer who has in his possession an object covered by another party's design patent is technically liable to prosecution as an infringer. Were designs authenticated by copyright it would be necessary to prove that an alleged imitation was copied from a registered design.

This allowance of full latitude of adaptation in design authorship is of the utmost significance in the printing art, where so much of current achievement not only finds its inspiration in historic examples but represents literally a regrouping and retranslation of motifs, themes, and elements known to the printing and manuscript illumination of the past. Copyright ethics leave the producer free to draw upon everything that is old in his art. The fundamental characteristic of copyright is that punishment may be invoked only for plagiarism. Novelty in subject matter is not a consideration — only its originality with its creator. Thus with virtue resident in an original idea, infringement may be charged only against those who copy the pedigreed idea.

Stock Ornaments Ineligible as Trade-Marks

Desire on the part of those who are willing to spend to attain unconventionality in typographical effects, that an all-sufficient channel be found for the establishment of exclusive property rights, has been intensified as it has become more apparent that trade-mark registration offers no alternative route. As early as the latter part of the last century, in fact, censors at the patent office began to show their prejudice no less in trade-mark registration than in the grant of design patents,

against subject matter that was accounted "ordinary printers' ornaments." By a precedent established in the Brunswig case, examiners of trade marks set up a rule that decorative devices classifiable as printers' stock ornaments are incapable of exclusive appropriation as trade-marks. It is a mandate in line with the dictum in the same quarter that more than an ordinary typesetter's skill is required to produce "artistic" labels.

In all disputes of property rights in printing mediums there is a disposition on the part of the higher federal courts to turn direct to the printing industry to ascertain what is accounted new and novel. Typefounders' catalogs are scrutinized, commercial art managers, and printing plant ex-

ecutives are summoned as witnesses and, in some instances, the arbiters have analyzed the typographical display in the current newspapers, popular magazines, and trade press. But for all that testimony may be taken as to what is recognized in the printing trade, say, as a novel font of type, in the final determination there must be due allowance for the impression created by a design in the eyes of average observers. On one occasion a federal judge remarked that there were individual peculiarities in a type font that would prevent the design from being regarded by the printing industry as a substitute for another font in the same ornamental vein, but that the differences between the designs to the average observer were small.

Printing in the Schools

By EMORY D. HARRIS

LATELY there has been much discussion and much written about the question of apprentices and school printing courses. The sum of it all is this: regardless of the fact that school printing shops are well equipped, well lighted, and the classes well attended, they have done practically nothing to relieve the apprentice situation.

As I have recently graduated from a large high school which conducts an exceptionally well equipped and well attended print shop, I may be able to disclose some reasons why the schools do so little for the trade.

The print shop in which I learned the fundamentals and a few of the trade tricks of printing was overcrowded with both boys and girls, most of whom had failed or nearly failed in academic subjects, and who fell back on such subjects as printing and auto mechanics to gain the credits necessary to graduate. The classes were extremely popular because no home work was required.

Of the many (over a hundred) who took the course when I did, not more than six seriously contemplated following the trade. Of these six I can account for five. One, the only girl, has married; one boy has not yet graduated; another is taking a post-graduate course in order to become more familiar with typesetting machines; one is

PEOPLE say, "Oh, he's too close to his subject to decide this question." It is equally possible to be so far away that your eyesight is faulty. If the problem is the apprentice question, and distance the difficulty, do not miss this contribution by Emory D. Harris. Graduated from a high school operating a high-grade print shop, he discusses why these school shops have accomplished but little, and offers suggestions leading toward a more effective development of these sources of human material. His plans, competently developed, might help in the improvement of this situation.

raising chickens, but only one is working at the trade.

The course was not expected to make a student particularly proficient in any one phase of the art. It was a conglomeration of presswork, stonework, composition, and much play. After we had worked a week or two on the presses we went to work cleaning out cases. After we became noticeably weary of this drab occupation we were put to work upon advertisements or straight matter. Those who showed intelligence were permitted to work on the weekly paper.

So frequent were the changes that we learned very few of the finer points of any of the opera-

tions. In all my high-school career I had never heard of a "mut" or a "nut." I had never heard of a nonpareil; all I knew about were leads, slugs, and quads. I did not know how to lock up a color job that was at all intricate and I learned nothing about letter-spacing. I did learn about "type lice."

You perhaps think, "I wonder if this fellow expects to learn about intricate color jobs and the finer points of composition in six months' or a year's time?" That is just the point. It seems to me that too much is crowded into the short terms.

It seems plausible that if the courses were confined in each school to composition only, or solely to presswork, pupils would gain a more thorough

knowledge about one operation and would also remember it. Perhaps the money spent on presses could be used for buying new and up-to-date material for the composing room, or vice versa.

How can the situation be relieved to the advantage of the trade, the school, and, most important, to the future printer? I have often thought about this, and below I offer some suggestions that, coming from an apprentice who started in a school shop, may assist in solving the problem.

While I was blithely setting wrong fonts and running cards without enough ink at school, I used to wonder whether there was any way in which I could get credit with the union for the time I was putting in, and whether I was learning the fundamentals of the trade in a coherent, orderly manner.

Could not the boards of education, in conjunction with a committee of employing printers who are interested in apprentices, decide upon a course in printing designed to carry the student on in a systematic manner so as to give him the training that will do him the most good when he is out of school and actually on the floor? Perhaps this committee could persuade the board to make printing

a difficult and honorary subject in which only the students who have passed other courses with honors could participate.

Perhaps these men could show the board the value of printing as an art, and interest them in its history. The authorities might be induced to include a compulsory course in which would be studied the lives of great printers, living and dead, and the evolution and development of our art.

Perhaps this committee, which ought to be a group of hard-working, unselfish men, willing to give time and thought to the job, could promote a series of national contests in composition and presswork in which all the schools might participate. If a reward, presented by a well known and respected man, were given each year, interest would be centered on the ideas of accuracy and perfection. The spirit of competition would promote a keener appreciation of the printed word.

And lastly: if the mind of the public were directed toward the creative, romantic side rather than the messy, tedious, and mechanical side of printing, the art would be a more respected one, and a higher grade of boy would enter the classes.

Group Printing—Yes or No?

By ARTHUR J. PEEL

ABOUT six or seven years ago a large New England concern, spending many thousands of dollars a year on form printing, engaged the services of an efficiency engineer to standardize all the forms used in the office and in the various plants which the firm controlled. In conjunction with this work the engineer developed the idea of group printing, that is, printing a number of forms of varying sizes and rulings on one large sheet 57 by 38, or any other convenient size. The idea was not entirely original with him, but so far as New England was concerned, this was the first time the idea had been given practical expression. As a matter of fact, the printing was not done in New England, but in Chicago, I think.

As an example of the significant savings resulting from this method, together with scientific standardization of all the forms used, I will quote

THE PRINTING industry can claim two classes of printers; and by their attitudes shall they be classified. When group printing is mentioned, one variety hands you the bitter laugh. "Why group printing? So I should bunch seven or eight jobs into one and accept a smaller profit while I save money for the customer? Not I!" The other kind of printer would rather support his decisions with authentic facts. Significantly or not, his kind is named frequently in the current "Who's Who, and How Much," by Dun. This authentic material will be appreciated by every genuinely ambitious printer.

one specific instance. One of the forms used in considerable quantities was a type-ruled form of material receipt, the original size of which was 8½ by 5½ inches. This form was incorporated with others in the grouped printing idea. This necessitated a slight change in the dimensions, and the new material slip was 8¾ by 5¾. The cost of printing the old form singly was \$11.44 a thousand. After incorporating it with other forms and printing them out of a sheet 57 by 38, the cost of the material slip was reduced to \$1.52 a thousand, and there was no waste of paper stock.

Some time later the writer received from a western technical college a detailed specification of seven accounting forms of various sizes and rulings, together with a bid from a local printer for printing about half a million of these. The estimate was about \$3,000, and the writer was told this was the lowest bid.

Where Group Printing Saved \$1,108

The forms were carefully studied, then standardized as to dimensions, and the possibility was considered of printing all seven forms out of a large sheet with one impression. It was found practicable, and on this basis an estimate was submitted by a printer whose prices are considered to be above the average in the city. The total cost to the customer was \$1,892. All the forms were type-ruled on a good grade of bond paper, some were perforated, and four of the forms were printed on both sides. The estimator was so astonished at the low cost that he had his figures checked by the local board of trade, which found them to be accurate in every particular and wholly sufficient to give the printer his regular, liberal profit.

In the last three or four years the group printing plan of printing business forms has gained considerable headway, but there still are many printers who buck the idea. Some time ago the writer published an article in a well known business magazine on the practicability of group printing of business forms. The editor was the recipient of several more or less indignant letters from printers who tried to show that this idea was quite impracticable, or that it would eliminate the possibility of the buyer of printing purchasing in the open market, because very few printers were equipped to do printing in this way.

The first objection is a fallacy; the second is probably true, to some extent. The fact that the Western Electric Company and many other large corporations and concerns have adopted the group printing plan, and have consequently saved many hundreds of dollars in their annual printing bills, is the answer as to whether it is practical. Instead of bucking the inevitable wise printers will grasp the opportunity group printing presents.

The Printing Service Bureau

There has recently come into being in New York city a printing service bureau. This bureau was organized by six of the largest printers of business forms in New York, and it exists primarily for the purpose of educating the buyer of printing in the most modern way of buying business form printing. In the literature issued by the bureau, the group printing plan is fully explained.

For example, it shows how, out of a sheet 22 by 34, fourteen different forms might be printed of the following sizes: two forms 11 by 8½, one form 14 by 8½, three forms 7½ by 8½, two forms 3½ by 8½, two forms 5½ by 8½, four forms 2¾ by 8½ — all of which could be printed at a cost of from \$4 to \$5 a thousand impressions. If one form were printed on a platen press the cost would run to something like \$2 a thousand for running only.

Attractive as this plan is to purchasers of printing, there are, of course, objections to meet, and the bureau has endeavored to meet these squarely and constructively.

It is a fundamental law of the printers' business that short runs result in high printing costs, and long runs mean low printing costs. In order to get the advantage of the lowest cost the buyer of printing must be prepared to plan his printing for an extended period, a year, if possible. But many buyers feel that this is taking too much of a risk; that it may be necessary to change some of the forms, and they would be left high and dry with several thousand wasted forms. Some may feel that they are not in a position to plan for twelve or fourteen forms in such a way that they can all be printed in one run of the press.

The Saving Cancels the Waste

The fundamental error on the part of the buyer in both these cases is that he is thinking in terms of *impressions* and not of *dollars*. By having his printing done on the group printing plan, thus making possible wholesale pricing and mass production, he realizes such a big saving in printing costs that he can well afford to take the risk of having, say, 5 per cent of his forms wasted, due to necessary changes in the makeup before the stocks are completely exhausted.

But the other objections are more serious. The buyer of printing may find difficulty in creating sufficient storage space for a year's supply of business forms. The answer to this is that he doesn't have to store the complete stock, but can take shipment only as needed. And this arrangement offers a solution for one of the printer's big bugbears — idle presses. With a contract to print a year's supply of business forms to be delivered as required, the printer is able to so plan his production that he can reserve sufficient presswork to keep his presses busy during dull periods. At the same time the customer gets what he wants, when he wants it, which creates satisfaction on his part.

You Pay Only for What Is Shipped

There is another aspect to this problem which should appeal strongly to many a buyer of printing: Not only can he take shipment as required, but he pays for his printing only as shipped. Many concerns are not prepared to pay for all their printing in the first month or two of the new year; it upsets financial plans, disorganizes budgets, and so forth. But if he is billed only as the forms are delivered and he desires to take delivery over a period of months, this difficulty is overcome. This is a definite service offered by the printing service bureau of New York. Of course, it is a burden which the printer voluntarily accepts and it will

be interesting to see how it will work out. Such an arrangement predicates a sound financial backing and long credit terms.

Another objection that has to be met is the belief that it is not possible to adopt satisfactorily a uniform paper stock for business forms. Of course, it is quite understood that the stock required for bookkeeping forms is too expensive to use in miscellaneous forms for the office and the plant. Apart from this consideration, there is no reason why a uniform paper stock should not be used for all forms of similar character.

What If Paper Is Sometimes Too Good?

Suppose it does happen that the paper required for, say, nine forms is of a better quality and weight than is really necessary for the balance of the forms to be printed from one sheet? The fact still remains that the economy which will be effected by the group printing will more than absorb any little additional expense incurred by using stock a little better than seems necessary for forms which have no permanence as records. Not only is it to the printer's advantage to buy paper in large stocks; it is to the customer's advantage also. Owing to the general ignorance on the part of the average business man as to the method by which printing costs are made up, he will not realize this until it is explained to him. This is part of the good work that is to be done by the service bureau, and from which much is expected.

Another objection on the part of many buyers is that with the admittedly small number of printing establishments equipped and financially able to undertake work of this character, they would have a very restricted market and would suffer from a lack of the "benefits" of open competition. Every reader of this article will see the fallacy of this argument.

The writer is acquainted with one large buyer of business printing who maintains as a fundamental of his creed that his printing shall be divided among four or five printers in the city who have served him well in the past. Laudable as this policy may appear, it is not *business*. If four printers are printing fourteen different forms, he is certainly paying a good deal more for the forms than he would if one printer, equipped for quantity production on the group printing plan, had the order for the entire fourteen forms.

Competitive Buying Not Eliminated

By specifying that forms shall be printed on this plan, the purchaser of printing does not eliminate buying on a competitive basis. He may, however, be obliged to go out of his own locality for bids and place his business with firms that are doing a national business in business form print-

ing. That this may work a hardship on the local printer is inevitable, perhaps, but it is the way modern business practice is tending more and more. The economic advantage to the consumer is too great to be outweighed by other considerations. He is bound to realize upon it.

The advantages of scientific records are being increasingly recognized, and the consequent cost of printed forms has become a very serious item with every large concern. But the far-seeing printer has had a vision of a vastly extended market by promoting the sale of one good form printed for one customer, in the entire field covered by that particular class of business, and even in other fields of business when the form is suitable. In this way excellent and valuable business forms are now "stock" forms, and can be purchased at low prices where, otherwise, the price would be prohibitive to many firms if the form had to be printed specially for each customer.

Today the big modern printer tends to have associated with him not only experts in printing, and draftsmen experienced in the preparation of business forms, but systematizers, and even expert accountants, who can talk to the prospective customer in his own language when it is a matter of bookkeeping and accounting records. Many of the readers of this magazine will recall the hullabaloo when some printers added an advertising service department to their organizations and offered to their patrons gratuitous editorial and copy-writing service. This did not please the advertising agents, of course.

Success Rests on Service

The printing service bureau of New York and similar organizations now in the pangs of birth in other large cities will have to meet a similar criticism, but if the service offered is adequate and competent this development in the printing business will soon justify itself. The problems of form drafting and form printing are too closely knit to be divorced. For many years the writer was a public accountant and knows from personal experience and observation in the field that ignorance of how forms are printed and of the routine and costing methods in a printer's shop, on the part of accountants, has meant the loss of thousands of dollars to clients.

The printer who will print anything that is given to him — if printable — is still with us, but the printer who has the vision will qualify as a *business consultant* in all matters pertaining to printing. This is the ambitious program of the printing service bureau of New York, and the achievements of the members of the bureau along this particular line are a guarantee that it can and will "deliver the goods."

Giving the Community Newspaper a Vital Personality

By ALPHEUS LINCOLN

HOW often in glancing over any large or small community newspaper does one become aware — perhaps at times subconsciously — of a woe-ful lack of *something*, and then later put the sheet aside with the tolerant excuse, "Oh, well, it's only a local paper"! And if trained newspaper men feel this lack, isn't it more than probable that lay readers also will sense it, and in so doing fail to give the publication the confidence and support that it must have to be successful in its field.

This lack is the absence of that intangible yet vitally felt force known as personality. Publications as well as individuals and firms must have it to be truly successful. It is variously defined, and in business is known generally as "a definite policy" or "a stand," whether it be a leaning toward conservatism or radicalism. But, one way or the other, it is always something definite, firm, and frequently uncompromising. There are no half-way measures; no trying to "sit on the fence"; no effort to remain neutral and hence be innocuously spineless, wordily vapid.

Personality — a Sure Sign of Life

Personality is a definite individuality that either draws one to or pushes one away from its possessor; either way, it compels the attention of both factions and thus becomes an active rather than an inactive force. Every one immediately recognizes it and acts or reacts according to personal convictions, personal likes or dislikes. But the point is that personality is never ignored; it's much too dominant to be thrust aside.

Good newspaper business always has and probably always will consist in taking issue with some person or some thing. Where no good issue can be found, create one. This doesn't mean that one should nag, scold, or whine, nor that it is good business indiscriminately to "jump on" picayune things, lambaste powerful individuals, or take personal issue with competitors or others in whom

CONSERVATIVELY speaking, this discussion is easily worth \$1,000 to every owner of a community newspaper. Mr. Lincoln's straight thinking spotlights the decrepit, dull, vapid publications which never quite seem to "go over big." He outlines their hesitant, spineless policy with a bold but accurate hand, and you realize that almost inanimate things can not be expected to grow and prosper. Finally he tells you, straight from the shoulder, definitely what to do about it. Follow his experience-taught counsel if you would receive that \$1,000 in increased profits within the ensuing year.

the public at large — the reading public of the publication in question — has no vital, personal interest. This would be as foolish as the procedure of the little man who suddenly rushed into some crowded street brandishing a gun and yelling, and who later, from behind the bars of the city jail, explained, "I was only developing personality; I wanted people to notice me!"

But there always are plenty of things that need fixing, things about which the dwellers in every community are vitally concerned and which would not necessarily involve the newspaper publisher who points them out in any long, expensive lawsuits. Occasionally,

even these are desirable, providing the issue is live enough and the need of a remedy so very apparent that no one can possibly fail to recognize the fact.

Urgent Issues by the Score

Public utility corporations and municipal and county organizations and administrations always come in for their share of abuse. Oftentimes they need it, so here are suggestions for a few good, safe issues along that line:

- Poor service over certain of the street railway lines.
- Disrepair of roads for which taxpayers' money had long since been appropriated.
- Improper representation of the district by the local councilman or representative; perhaps he should be removed and another put in his place.
- Lack of proper street illumination.
- Absence or ineffectual functioning of a strong local businessmen's association to fight for the betterment of the community, both industrial and artistic.
- Impurity of the city water supply due to negligence on the part of the chemists connected with the bureau of health and hygiene, or else the inadequacy of funds to carry on this work.
- Improper police or fire protection.
- Unnecessarily high rates of the telephone, gas, or electric light companies as compared with rates quoted in nearby communities.
- Deplorable inadequacy of the drainage system, turning streets and roads into miniature rivers after slight rain.

Overcrowded condition of or poor instruction in the public schools (perhaps true of only certain schools).

Penurious or heartless manner of caring for inmates of the county poor farm.

Always Maintain the Leadership

Almost countless other issues can be found in communities everywhere. The publisher can choose for himself, pick the paramount evil — the one nearest the hearts and personal interests of his readers — and in the role of public defender take up the cudgels and fight for the rights of the people. The public will love it, will rally to the publisher's standard and help him eradicate or adjust the wrong through the formation of committees, the circularization of petitions, and so on. But always the newspaper initiating this crusade must maintain itself as the leader, the dominant active power around which, through which, and because of which the battle is waged.

Be careful, however, to avoid becoming embroiled in religious or political differences of opinion. These discussions pro and con are not constructive, do not lead anywhere, and only serve to stir up non-progressive, seriously harmful prejudices and hatreds.

Editorial Policy Affects Advertising

Another matter of importance is that of form and general makeup. So many publishers of community sheets seem to feel that excellence of makeup, including uniformity of type fonts for heads, and a definite, firm policy toward all advertisers concerning the free and indiscriminate publication of so-called news items mean nothing.

Some owners of newspapers even have said, "Never mind about all this; go out and get the ads." They do not realize that the best solicitation in the world can not hope to secure maximum results for a sheet that is just so much paper and ink in the form of odds-and-ends of type, with no character and vitality.

The selling of advertising space is one of the highest forms of specialized selling because to the majority of even the best prospects it is somewhat intangible, something like buying so much hot air. So the really astute publisher does everything in his power to aid the solicitors on whose efforts he must depend for the bulk of his revenue. He has a definite editorial and advertising policy — one that will not brook discrimination — and a clean-cut, uniform makeup, and he also sees to it that the contents of each issue sparkle with that most-essential-to-success quality, "reader interest."

Matters of Makeup

A good makeup is one that is dignified and is adhered to rigidly. The name of the publication at the top of the first page should carry a subhead in

the nature of a slogan or definite statement of policy. This front page also should carry a feature news story and news of distinct interest to the community, but no free "puffs" whatever for advertisers. Promotional advertising for the paper itself — circulation statements, efforts to induce increased use of classified advertising columns, results obtained for past space users in the form of the reproduction of laudatory letters, contests being conducted by the newspaper, etc. — is permissible, of course, although even this material should be employed with reasonable thought as to how much of it will be read with interest by those who subscribe for the publication.

Uniform type fonts for news-heads and a uniform style of set-up, the more important news at the top of the page and the less important shorter items as fillers toward the bottom, make an attractive front page that is easy to read and therefore will be read with satisfaction. It will help to develop the much desired strong reader interest.

The Essential Fitness of Things

Church notices, news of school, club, society, and association activities, the magazine, sports, business, and theatrical section, advice to the housewives and mothers, recipes, etc., generally belong on inside pages in positions more or less regularly assigned to them, while the back page usually should be reserved for half and full page advertisements, as it is the best position. Advertising copy elsewhere should be pyramided upward from the bottom of the page and toward the right, the news matter and stuff of general interest filling in the upper left-hand side. Thus each page is "in focus" and most convenient for readers.

On the Editorial Page

If the statement of ownership and so on at the top of the editorial page is run double column with the editorials immediately beneath also across two columns, but in ten or twelve point type double-leaded between lines (frequently the compositor's time for double-leading may be saved if the linotype operator will set the ten or twelve point editorial matter on eighteen-point slugs), the change will be a welcome one. It will make the editorials more decipherable for the older and perhaps less keen-eyed among the subscribers.

By these means, employed consistently as the permanent policy rather than by occasional spurts, a publication may acquire a definite, pleasing personality and become such an active, progressive force in the community that its earning power will be increased immeasurably. And the publisher, in accomplishing these aims, will not only find a joy in this work that he has never achieved before but will increase his income at the same time.

THE PROOFROOM

By EDWARD N. TEALL

Questions pertaining to proofreading are solicited and will be promptly answered in this department. Replies can not be made by mail.

Predicate Pronoun

New Yorkers have an undeserved reputation for thinking they know it all, but one at least of them is not too proud to confess uncertainty and ask for information, for this inquiry comes from Bedlam-on-the-Subway: "Please settle an argument by giving us your opinion. 'Was it Frank you gave it to?' 'No, it was not he.' Should it be 'No, it was not him'?"

Not a matter of opinion. Simple matter of elementary grammar. The final pronoun is a predicate pronoun, agreeing with the subject in number, gender and case. "It was not he" is the *only* grammatically correct form, though in common speech tolerance of the objective, "It wasn't him," is steadily growing among authorities.

Hendiadys and Synonymy, Two Things

This is from a professor of industrial editing in Oregon: "Your conclusions as to the number of 'which' in the sentence 'It is the single-handed courage and intrepidity of these men which appeal to the imagination' is right, I am sure, but I am a little dubious as to the validity of your reasons for them. I think 'it' is the impersonal subject and not an introductory expletive, that it and it alone governs the verb in the singular, and that the singularity of 'courage and intrepidity' must be determined on other grounds. The sentence may without change in grammatical relationships be stripped down to 'It is the courage and intrepidity which appeal (appeals).' 'Courage and intrepidity' may be either two terms for different things or two terms for the same or a single thing. Their synonymy indicates that they are a single entity with the flavor of both terms — courageous intrepidity, or intrepid courage, a real hendiadys, as Fowler suggests. But even this is not requisite to their singularity. Their mergibility indicates singular number, just as bread and butter are singular in the sentence 'Bread and butter is a good food.' 'Courage and intrepidity'

would be singular even without the definite article, 'the,' before one of the terms only, but used thus it leaves no alternative — the antecedent of this 'which' is singular and 'which' governs the verb number, 'appeals.'"

Sure; and "which" is singular because it hitches up with "it." "It which appeals is." "It is so-and-so which appeals," and "courage and intrepidity" are two separate parts of the itness and whichness, an interjected explanation and an amplification. "Courage" and "intrepidity" are not synonymous. They do not make a perfect hendiadys. The perfect hendiadys (hen-dia-dys, one-through-two, one idea expressed by two nouns) reduces to a phrase: "vi et armis," literally "by force and arms," equaling "by force of arms." For those who enjoy puzzles of grammar, consider what happens if you make the following expression part of a complex sentence: "It is the courage and intrepidity which appeal to the imagination that we wish to discuss." Or, "It that we wish to discuss is the courage and intrepidity which appeal to the imagination." Follow through!

More Apostrophes

Hearty greetings to a friend in Toledo, Ohio, who writes: "In your November issue appears a query as to the proper mark for the proofreader to use as a query. I use a plan which works satisfactorily; all queries and suggestions are indicated with a red pencil. Both the operators and floormen understand that a red mark is to be ignored, and they are readily found to transfer to the author's proof."

"In the December issue is a comment on the use of the apostrophe in 'Mothers' Day.' In Toledo we have a Woman's Club and a Woman's Building. Just why the singular is used in these cases is not clear to me. We also have the Women's Realty Company and the Women's Advertising Club. Then there is the Merchants and Clerks Savings Bank and the People's Savings Association. Getting consistency into names of associations seems

a difficult matter. Each one seems a law unto itself. I also have to pass 'Lumbermens Insurance Company.'

"A question on which I would like an opinion is the proper treatment of names like 'McDonald,' 'MacDonald,' 'DeVilbiss,' when set in caps. If the apostrophe is used in 'McDonald,' and 'Mac Donald' is set as two words, as is frequently done, we arbitrarily make two words of what is essentially one word, and if set as one word we confuse it with 'Macdonald.' My opinion is that in the absence of small caps, lower-case letters should be used for the 'c,' 'ac,' and 'e,' and all set as one word. Looking back over a period of years in a printing office, I recall many fonts which had no lower case and the use of the apostrophe was a necessary makeshift, which may account for the use of the mark indicating an elision."

"Who" or "Whom"?

A printer in Boston wants to know: "In the following paragraph A claims that 'whomsoever' is correct, while B claims it should be 'whosoever': 'Authorized dealers of said company shall have a right to sell a — piano to whomsoever may call at the warerooms for the purpose of purchasing a piano.' Please rise and shine."

My favorite referee, "Constructive English" by Francis K. Ball, gives these examples: "He greeted whoever entered." "He greeted whomever he met." In the first, the compound relative pronoun is the subject of "entered"; in the second, it is the object of "met." The difficulty is, quite obviously, that one pronoun sometimes has to do the work of two, whereof one may be nominative, the other objective. Mr. Ball gives another example precisely similar to the one in the Boston printer's query: "Nature has a kindly face for whoever seeks her company." In this sentence the compound relative pronoun has to supply an object for the preposition and a subject for the following verb. Much easier to accept is this, "She received a warm welcome from whomever she visited," for in this

one the pronoun is objective in both its relations — object of "from," and object of "visited." The rule given is, "The case of a relative pronoun is not determined by the antecedent of the relative, but by the use of the relative in its own clause." But still the feeling of uneasiness persists in any mind sensitive to the niceties of expression. The authority cited favors B ("whosoever") unequivocally, but for myself personally, I will declare I think it is easier and more satisfactory to say "whomsoever," as the pronoun directly follows the preposition, and mentally to supply the subject for "may call." I insist that it runs along more smoothly that way; requires less expenditure of mental energy, and can be defended very handily — if you are willing to be free minded enough to admit that some of the rules of grammar are simply human endeavors to say conclusively what can't be said that way.

Captious Criticism

Here is a letter from England: "You will not be surprised to read that your Proofroom pars are carefully scanned on this side. Informative, provocative and in most cases decisive, that section is always read with profit and pleasure. There is fair and judicious statement in every answer; devoid of dogmatism. After reading the Proofroom in the February number, I turned to page 765 and read one of the answers to the editorial in the December issue, 'What Is the Major Problem?' 'Too few' always seems to me a contradiction of terms. Isn't the adverb 'too' overworked in this case? 'Too few,' four times; 'too many,' twice; 'too little,' twice; 'too much,' once — nine times in sixteen lines. To be consistent another 'too' should appear, and 'The industry is (too) overequipped' would have completed the statement of opinions. What do you think?"

Well, he is asking for it! I think our English friend's criticism is of the captious variety. "Too few" may perhaps be open to criticism, in writing that pretends to be artistically literary, but the "toos" in the article make a perfectly satisfactory job of what its writer set out to do. He was more concerned with what he had to say than with the manner of saying it — therefore, as usually happens when a man really has something to say, the manner was workmanlike and the expression unambiguous. The repetition of the "too" clauses gave a certain vividness and emphasis that might easily have been lost had the writer tried to avoid them. The final flip about another "too" that might have been used kills the English writer's chance of getting

by, for it is sarcastic and not truly critical. The fact that the first writer did not use it with "overequipped" shows that he was writing with care.

"Lesser"

From Weissnichtwo: "A copywriter at our agency submits the following: 'No lesser a personage than Theodore Roosevelt . . .' My contention is that it should be 'no less a personage.' What do you think about it?"

No thinking about it; that copywriter is simply dead wrong, and to put out such copy would give the agency a black eye. "Lesser" is used with "the": "the Lesser Bear," *Ursa Minor*; "God made the lesser light to rule by night." "No lesser a . . ." is wrong. "Less" is a comparative of "little." "Lesser," on the other hand, is a double comparative.

Semicolon and Quote

A Pennsylvania printer chooses to ask: "Should the comma be placed before or after the apostrophe in the following: 'Ladies', Misses', Children's Hosiery'?" Should the semicolon be placed inside or outside the quote in the following, 'Chuck, a member of the "gang";'? In straight reading should 'jr.' the abbreviation of 'junior,' be capped or lower case?"

The comma follows the apostrophe; otherwise, the apostrophe would look like a lost single quote.

The semicolon should follow the close-quote; only periods and commas should be placed inside the close-quote, other marks being placed according to the logic of their use.

"Jr." should be capitalized, though quite a few persons, in these days of restless searching for "something different" and of what seems to me a painfully elaborate simplicity, would okay the lower case "j."

Capitals of Reverence

Now we go back to Boston: "Will you please give your opinion as to whether reference to the Deity in the enclosed paragraph, set in lower-case, is allowable, or should it be capitalized when there is no antecedent?"

The paragraph: "Happy and strong and brave shall we be — able to endure all things and do all things — if we believe that every hour, every moment of our life is in his hands.— *Henry Van Dyke*."

I earnestly advise using the capital, "His hands." All the more, because the antecedent does not appear. The capital initial gives the clue.

Incidentally, Dr. van Dyke spells his name with lower-case "v."

Amateur Copy

By EDWARD N. TEALL

EVERY editor and copy reader would be glad to hear that the public schools were planning to teach the elements of copy preparation. Every editor and copy reader has had his nerves tortured and his temper spoiled momentarily at least by bad copy. And every compositor, every proofreader would join in celebrating such an innovation in the school program. Poor preparation of copy causes economic waste in the printshop, in addition to the wear and tear on the personnel's nerves and temper. The work is fussy enough at best; in a newspaper plant its difficulties are magnified by the pressure of time, the constant demand for speed. Anything that adds to the irritations detracts from the quality of the work and the product; anything that reduces the mental strain, relieving attention from small detail to permit free concentration upon major matters, is a contribution to the welfare of the printing industry and to the perfection of paper, magazine and book.

Those engaged in magazine and book work suffer less from bad copy than those who help in the making of newspapers. Their writers are apt to be professionals, and even the novices are pretty sure to be persons used to putting words on paper. They work deliberately and carefully. Even they are frequently unacquainted with the processes through which their manuscript, if accepted for publication, is destined to pass, but their worst copy is a printer's dream of delight in comparison with the nightmare copy that passes over the editorial desks of a newspaper office day in and day out.

Pity the Copy Reader

In handling the high-grade copy that comes to the book publisher, the editorial person is comparatively free to concentrate on checking up on style and accuracy, with no occasion to rewrite. But the newspaper copy reader has to cut in here and there, changing words, recasting sentences, transposing and

deleting, inserting words or even paragraphs. The copy is raw material; sometimes so raw you would wonder how it could ever be licked into shape in time for the edition. The reporter is ever hurried; he has to get his story down on paper any way he can. In the smaller cities, where many suburban and country correspondents contribute, copy is frequently hand written; scribbled, rather. The copy reader, struggling with this mass (or mess) of stuff, becomes to all intents and purposes, at least, the rewrite man.

Copy Reader Has Two Functions

What I am thinking about, as you perceive, is not the art of expression, the literary quality of matter submitted for publication, the task of improving a writer's composition; it is the mechanical task of giving the final editorial licks to the writer's work. The copy reader has two functions: he represents the publication in giving articles the form in which they shall be presented to the public; and he prepares the copy for handling in the printshop. One function is editorial, and the other is mechanical.

In making an editorial page for the newspaper that buys my days, I run a department of letters from our readers. It runs anywhere from two to three columns a day, and it takes two or three hours of good, hard, concentrated work to lick that copy into shape. Contributors seldom know that the paper is responsible for what it prints, no matter who writes it; that publication is the essence of libel, and that the newspaper can not afford to offer itself as a medium to those who wish to work off private grudges or spread inflammatory, perhaps seditious ideas. So, although the paper is admirably liberal in spirit, constant editorial watchfulness is required; every sentence, every word, must be checked up. Then, too, as the city is industrial, it frequently happens that the finest letters are the worst written; and while I learned many years ago not to spoil a natural style by trying to polish the expression, it is absolutely necessary to divide the letter into paragraphs and sentences, and to change a word here and there to make it inviting to the reader.

The brainy part of this task is complicated by the mechanical part. The first thing I would change, if by waving a magic wand I could reform the literary habits of the multitude, would be the crowding of words on the paper. Each sheet of copy has to be marked at the top, "edpage — Mailbag," and the number of the sheet. Then, each letter has to be headed and provided with the "To the Editor" line; and it takes

space to do this. But almost invariably the writers start in at the very top of the page, leaving no room for the editorial pencil. Lines are run clean out to the margin. Lines are crowded up close, so that there is no room to stick in a word. Does it seem picayune to complain? It would, if there were not such an easy remedy available in the simple suggestion with which this article opened, that the schools should teach the elements of copy preparation.

Saving Paper Is Poor Economy

It is surprising that the schools do not train all students to write on one side only. I frequently run a box note with my correspondence column, with a motto, "Two sides of the question — one side of the paper." But it is shouting against the wind of habit. Letter after letter comes in, written on both sides of the paper, necessitating the copying of half the letter — or, when time presses, the omission of most of the matter on the reverse side of a sheet, or possibly rejection of the letter. The schools apparently economize on paper, permitting students to use both sides of the sheet.

Almost every one is sure at some time or other to prepare copy for the printer. Thus the plea for some training in copy preparation in the schools has justification in the universality of its usefulness. It is not merely a plea to lighten the labors of editors and printers, but one in the interest of everybody.

The Cart Before the Horse

The high schools teach Latin to boys and girls before they know what language is. The other evening, I heard Trader Horn on the radio. An African jungle chief was supposed to be talking to the young white man. He called him something that sounded like wah-wah. Well — there is the reduplication of primitive speech. The South Sea Islander uses it. So does all primitive speech. So does the child of civilization. The dog is a "bow-wow." The locomotive is a "choo-choo." The mother, talking baby talk to her infant, goes back to the beginnings of language when she says, "Naughty-naughty." Boys and girls do not know a thing about language when they are dumped into Caesar, "very high mountain impendebat." They know nothing of grammatical structure, of the difference between English and continental European, roots and inflections, syntax and structure. They are told this in Latin means that in English, and one ending to a noun means "to" or "for," mysteriously called the dative, while another ending (usually the same ending) means "by" or "from," the abla-

tive. They learn Latin by rote; they seldom catch its spirit, seldom learn to read it without deliberately translating, word by word, and then patching the words into something that seems to make sense. The mistakes their teachers laugh at are the mistakes of intelligence rather than ignorance.

Is there any reason why educators ushering young students through the gateways to the wondrous Land of Learning should not include in elementary school or high school offerings a little instruction in these matters? For my part, if choice had to be made, I would rather give boys and girls a little initiation into these mysteries than to try to tell them what some essay of Emerson's meant, or explain to them the meaning of "Paradise Lost." But there is no need to make such a discrimination, because instead of requiring a sacrifice of any present part of the program, this teaching could be added, easily. In fact, one single class period could be made to cover the essentials, planting in the young minds the major points: Write on one side of the paper only; write clearly; leave liberal margins, especially at the top of the first page; space generously between the lines; indicate paragraphing unmistakably. And in every written exercise, in English classes, these points could be practiced.

Such instruction would be useful to the students in a practical way, and it would go far toward lightening the load of trouble borne by workers in editorial room and printshop.

The Right Foundation Essential

If there is one place more than another where the public schools fail in their work of educating the people, it is at the gateways. The way into a subject is important. When my oldest son (of four) was a small boy, we lived down on the Jersey shore. I was then on the old New York *Sun*, commuting a hundred miles a day, so as to live where I wanted to be in my free time. I used to talk to the kid about geography. Showed him the difference between a picture and a map, with our own place as an object lesson. Drew a crude picture of the house, in among the trees, as it looked from the front. Then led him on to imagine an airplane view, turning the walks into lines, the house into a flat shape. Then we built on, step by step, the street, the intersecting street, the lake, the bridge where the highway crossed; the shore, the parallel line of the trolley.

I believe that introduction helped the boy to understand his geography, as a living subject, when the time came for him to take it up in school.

Printing Industry's Headaches and Some Tested Cures

By RUEL McDANIEL

WHEN the average owner of a printing plant is ill, he either buys pills at a drug store and takes them, or he goes to a physician who probably prescribes some form of pill. When the printing business has its headaches and other pains, it is logical to give it some carefully selected pills which every printing-plant owner has at his command, to effect a cure. And nearly every printing business has its headaches; in fact, firms have died from maladies starting as local headaches.

An outline of these various headaches, with their treatment, may serve to help printing-firm owners to recognize and remedy the ills in their own businesses when the symptoms appear.

Among the most common headaches attacking the printing industry are:

Lack of demand for printing service and products.

The price problem.

Careless credits, failure to ask for deposit, and speculation.

Unfair competition.

Annual volume too small to produce a really worth-while profit on the investment.

Lack of appreciation for good printing on the part of the public.

Customers' habit of switching from one printer to another for no logical reason.

To cure these headaches there are many logical pills, already proven logical by one printing firm or another here and there over the country. Nearly all of these pills are flavored with some form of advertising; some are strongly advertising. Here are some of the pills that have effected cures in other printing firms:

Feature Your Firm's Name

The printing concern which does not have a distinctive name and use it to create value year after year is passing up one of the most effective pills the business can take.

In the Southwest was a printer who prided himself on his work and produced an excellent quality of printing. Yet the business did not seem to grow with any noticeable speed. The owner, finally analyzing the situation, decided to change the name of the firm. He had a long, foreign-sounding name which he used for the business, and had never taken the trouble to give his establishment a name of its own.

Finally he adopted a company name which was pleasant to speak, easy to remember, and readily associated with good printing. Whether or not this turned the trick, the fact is that the printer's business began to pick up and today is one of the best-known concerns of its kind in the state. He believes that the new name did the trick.

Use a Live Trade-Mark

What manufacturers do on a national scale, printers can do sectionally or locally through the consistent use of their adopted signature or trade-mark — a trade-mark that is pleasing to the eye and quickly distinguishable as the representative of one certain printing concern. Advertising matter, gummed wrapping tape, wrapping papers — anything used by the printer to advertise his business that goes out of the plant without the firm's trade-mark or signature upon it in the adopted form is comparable to a six-cylinder automobile running on five.

Employ a Snappy Slogan

The slogan "Pittsville's Particular Printer" has helped one small-town printing concern to grow to a much larger size than the community would seem to justify. Never does this firm send out a piece of advertising unidentified by this slogan. It is on all wrapping paper used by the plant; it is found, of course, in all the firm's newspaper advertisements. It has been so popularized that people in that section think of this concern when they think of good printing.

It costs nothing extra to use a good, catchy slogan, yet the right sort of slogan adds an extra paddle to the sales canoe. Let the slogan be suggestive, and it should tie up definitely or by unmistakable allusion with the firm using it.

Make Your Windows Work

There was a time when the mouse-trap theory probably worked, but it seldom functions according to tradition today. Possibly in the past, if a printer was really unusually skilful in his craft, the town would discover it and make a path to the back door of his ramshackle shop; but not today. Too many other good shops along the way are bidding for the prospect's patronage. He forgets where he is going before he beats the traditional path.

Business nowadays goes where it is invited, and one of the most productive invitations is an attractive plant front, with a neat, impressive sign and show windows with something in them that hold the attention of the passerby. Not every printing establishment sells stationery and office supplies, but there is no printing plant that does not have samples of previous jobs worthy of a display in its show window. Also, no thoughtful printing executive would send out a salesman dressed in dirty overalls; and yet some printers permit their show windows, excellent salesmen twenty-four hours each day, to look a great deal worse because of dust, neglect, and a generally seedy appearance. That is more serious than failure to utilize them, which is bad enough.

Smart Delivery Trucks

Some concerns recognize in delivery trucks the opportunity to have an action advertisement moving about the city streets nearly all day, and accordingly keep their trucks looking snappy and altogether interesting from an advertising standpoint. It costs no more to operate a delivery vehicle that carries a sales-building advertisement on each side than it does to operate one with nothing at all painted on it, and the printing establishment that uses its delivery equipment to the fullest extent as an advertising medium considerably relieves some of its aching spots. In fact, it's a big help toward the cure.

Good Printing Advertisises Good Printing

Aggressive merchants have discovered that the way to increase the sale of their merchandise is to set an example to the public by using the merchandise themselves. Clothing merchants and their salesmen several years ago decided that if they could "put over" the idea that success depends considerably upon how a man dresses, they could increase their business. Accordingly, merchants and floor salesmen began paying more attention to their own attire. As a consequence they began to set an example to other men, and it is reported that this industry has considerably increased its sales as a result. The modern thought in merchandising is: Use whatever you recommend that others should use.

Yet many printers wait until they have some left-over odds and ends of stock and nothing else to do before they get out any advertising for themselves. Even then they consider that, since there is no customer to please, there is no particular reason for doing the job well. Anything will do, so long as the men are kept busy and the old left-over

stock is utilized! Obviously, the average business man can not understand why a printer using flimsy, carelessly arranged and cheap advertising should attempt to convince a prospect that he must use quality direct-mail advertising in order to get real results.

One printer says that his ills began to fade away very soon after he had started printing and mailing an attractive monthly calendar to a selected list of customers and prospects. He gets that calendar into the mails three or four days before the first of every month, regardless of how busy his shop may be; and in some instances he orders special stock for the calendar.

Recently one prospect, who had been receiving the calendars regularly, placed an order for more than \$400 worth of folders, to be produced on exactly the same stock that the printer used for the note which had accompanied the last calendar mailed. Several other smaller orders have come as a direct result of this prospect having been interested by the paper stock or the style of type the printer used.

Newspaper Space Will Help

The far-sighted printer does not cling to the idea that direct-mail advertising can always accomplish the whole advertising job. He advises the use of magazines, newspapers, posters, and novelties in some cases, because he realizes that sometimes one form of advertising can be helped by the use of other forms. It is logical, then, that the printer should use newspaper space and even posters to reach the people whom he might not be reaching with his own direct efforts, and doubly to impress his name and service upon those who do receive his direct-mail.

Sell Them and Keep Them Sold

Although printing is one of our country's oldest arts, it is generally admitted that the average business man knows next to nothing about printing and what it can do for him. That is because he has not been told. The printing establishment that puts on a consistent selling program aimed at showing business men what good printing really can do for him will get surprising relief from some of its most chronic headaches. That selling can be carried on through both direct-mail advertising and personal solicitation. One is not entirely complete without the other.

Step Ahead of Competition

Keep out of the competitive class. The outstanding printers today are those who hold on to their customers through consistent service and continual selling. They gradually teach their

customers that price is not the vital consideration on an important printing job. Incidentally, note the difference between rising above competition by this method and attempting to ignore it in the subterranean fashion of the ostrich. A printer must recognize competition in order to be able to rise above it. If he doesn't he can not know what it is necessary to do in order to beat it.

More Profit Through Volume

One Pacific coast printer in 1925 did about \$50,000 of business. After paying all costs and allowing a salary of \$250 a month for himself he had a net profit of only about \$3,500. In 1926 his profits were appreciably more, yet he made no outward changes in his methods. He was asked how he did it.

"Well," he replied, "at the end of 1925 I figured that I had taken the responsibility and worry and had risked my money in the business, but had made no more than I could have made

as a salesman on the road. I decided that there was something wrong with such a business. I went over my books, and concluded that I was not getting as much business as my investment and equipment justified. I believed that if I could increase my business 15 or 25 per cent this last year I could double my profits, because I realized that I could easily handle the increase in business with my same equipment and overhead.

"I set out at the beginning of 1926 to do at least \$65,000 of business without cutting prices or adding to my overhead. I got \$63,000 in business, but my net for the year was nearly \$8,000, as compared to \$3,500 the year before. My salary was the same for both years."

That extra \$5,000, \$10,000, or \$15,000 can easily represent the difference between mere wages and a real profit consistent with the investment in money and time. Usually this extra business can be secured through just a little tightening of the sales effort.



"In the Days That Wuz"—You Couldn't Blame Him

Cartoon by John T. Nolf, Printer-Artist

What's Wrong With the Small-Town Newspaper?

By R. INMAN PEELE

Director of National Advertising, East St. Louis "Daily Journal"

WHAT'S wrong with the small-town newspaper? Why doesn't it get more business than it usually does? And why is it usually cut off the lists first when advertising appropriations are reduced or a new advertising manager steps in?

The answer is — itself. The average national advertising department, if there is one in the country newspaper, expects to do business with an agency in some distant city much in the same manner it does in its own community. By a haphazard mail solicitation, it expects to compete with a neighboring metropolitan daily which has extended its more or less vague trade territory to include the town in question. And as most city newspapers generally have a habit of getting up surveys — facts and figures to show complete coverage of any town within a day's journey away — the country advertising manager usually runs into a stone wall when he tries to get business. He can't do it — at least not until he adopts the more exacting methods of his influential competitor and furnishes the data needed by advertisers.

Generalities Will Not Do

The representatives of the small-town newspaper are not much better off. They usually have nothing to sell except numerical circulation, and in these days of quality coverage that doesn't mean a great deal. It stands to reason that the space buyer of an agency several hundreds of miles distant is going to throw his copy contracts to the paper that can give him facts in preference to one which contents itself with a more or less general solicitation at best.

Some weeks ago, in the course of a conversation with the space buyer of an agency noted for its scientific methods of research, the remark was made by him that he could throw fifty per cent more business to the country newspapers were they able to supply him with information relative to the market resources of their respective cities. In other words, rather than gamble with the potentialities of the small towns individually, the agency carries its advertising in the metropolitan daily which has definite claims to coverage.

Some time ago the East St. Louis *Daily Journal* made a survey of the resources and market conditions in East St. Louis. Incidentally, the position of this city, in a trade way, is one of the most difficult imaginable. St. Louis lies directly across the river and is very easy of access by means of three bridges. Many East St. Louisans were employed there, and the natural belief was that a big part of East St. Louis trade went to St. Louis on that account.

Just Plain Bluffed!

For this reason, apparently, most of the merchants in East St. Louis had been bluffed into pushing only the cheaper grades of merchandise in the belief that they could not compete with the larger concerns on the other side of the river. Some of them seemed to have the idea that the public would not buy any of the more expensive articles in East St. Louis. In other words, they had an inferiority complex. They had themselves licked. Obviously, a situation such as this was bound to reflect in the advertising lineage of the *Journal*. No great amount of advertising could be devoted to pushing cheap stock. It wasn't worth the money and effort required, for the volume of sales needed to make such business pay was beyond all reason.

The survey brought out several interesting and encouraging facts. All merchandise sold in East St. Louis was divided into five groups known as fundamental expenditures. These groups consisted of food, building material, household appliances and equipment, automobiles and accessories, and clothing. The tendency of East St. Louisans to buy these things in this city was graded as excellent, good, fair, and poor in proportion to the amount of money they spent here as against the amount diverted to St. Louis.

Food Was All Right

Food and groceries were checked as excellent. The housewife made her purchases at the most convenient or reasonable grocery in her neighborhood or came downtown to the larger grocery houses. The amount of groceries that East St. Louisans buy in St. Louis is negligible. Building material was also given an excellent grade. It was found

East St. Louis had all the necessary facilities for construction, and prices, if not lower, were at least as low as those in St. Louis.

The sale of automobiles and accessories was almost exclusively confined to East St. Louis, the only cars bought out of town being those for which there were no agencies in this city. Household equipment and appliances received a slightly lower grade for, while the furniture houses and other concerns handling these articles did a good business in the lower-priced lines, the consumers of the better merchandise usually went to St. Louis. There they could see a complete stock at any price that they wanted to pay, so, and naturally, they bought where the goods were available.

No Money-Makers in Stock

The sale of clothing, however, was rated as only fair. The reason for this was not that prices were more reasonable in St. Louis, but because of the fact, as we have stated above, that the merchants were only placing the cheaper stock on display and made almost no effort to push the higher-priced and more profitable lines.

This survey was ostensibly for the purpose of formulating sales arguments for national business, but that portion of the data described above, while it was a very good sales point in itself, also illustrated to our local display department the vital weakness in the merchandising methods of some of the larger stores in this city. Knowing that weakness, it was of course up to us to find a practical remedy, and at the present time the local department is formulating plans for ameliorating the situation.

Don't Fear the Distant Competitor

East St. Louis is an extreme example of some of the difficulties which the minor city faces. However, other cities of similar size are probably not under some of the handicaps that we experience in this city. For one thing, the merchant in the average town has neither the caprices of the very rich nor the limitations of the poor to contend with. As a result, with a stock of popular-priced merchandise and a well directed advertising appeal, he should have no trouble in bringing the consumer into his store in preference to that of a competitor in a distant city, who faces the disadvantages of lack of contact, truckage, and other direct or indirect handicaps.

Such a survey does not require a great expenditure of time or money, as it is usually comparatively easy to get any data needed because of the personal contact possible in a small town.

PHOTOMECHANICAL METHODS

By S. H. HORGAN

Queries regarding process engraving, also suggestions and experiences of engravers and printers, are solicited for this department. Replies can not be made by mail.

Wesel Photomechanical Catalog

F. Wesel Manufacturing Company, from their new home in Scranton, Pa., send a copy of their newest catalog of 302 pages, handsomely bound. It will prove a valuable reference book for all buyers of photomechanical equipment, for this work is a compilation of what different manufacturers can supply in the way of lenses, electric lamps, machinery, and various kinds of apparatus. It includes a good list of artists' materials, dry plates, shading media, and the great number of requisites that now enter into up-to-date plants. The volume recalls to mind the splendid Penrose catalogs when edited by William Gamble. The eight pages devoted to Wesel halftone screens will attract attention, as well as a new Wesel Washington hand press that appears efficient. The illustrating, engraving, and printing of the book are well done. The editor of the work is especially fond of hyphens, for he has introduced them into such words as "photo-lithography," "photo-mechanical," though the tendency is to drop the hyphens, as in "halftone," "photoengraving," etc. This book should interest every photo-engraver and be within reach at all times for use as a reference. No price is given on any article. The F. Wesel Company are to be congratulated on their enterprise in creating a catalog of such marked value.

Rotogravure From Thin Copper Plates

The majority of the prints shown in the picture stores, which startle one by the strength and beauty of their colors, are rotogravures, frequently printed, when the edition is small, from thin copper plates etched intaglio by the Karl Klietsch method and then drawn around the printing cylinder in a manner similar to that used with zinc or aluminum sheets in offset or direct printing. The dealers in these beautiful colored prints can not tell you how they are made, but only that they come from France, Switzerland, or Italy.

William Gamble delivered a most comprehensive lecture on this subject

before the Master Printers of London, at Stationers' Hall, on February 8. His paper is printed in full in the February 16, February 23, and March 1 issues of the *British & Colonial Printer and Stationer*, London. It is a review of all the presses that have been built for this purpose, from the Penrose machine of 1902 to the ones now being constructed.

Speaking of the machines projected in this country, Mr. Gamble says: "Until recently American machine makers viewed the (copper) sheet idea with indifference, but lately I have read that an offset gravure machine printing from copper sheets has been shown in New York, and has so impressed a number of leading printers that Messrs. Hoe & Co. have taken up the manufacture of the machine. The inventor claims he has a special kind of ink which makes the offset proposition feasible. It is remarkable what a fascination this offset gravure idea has for some people. I also hear that the Potter Press people are entering the field with a press on similar lines."

Since December, 1908, this department has printed much about rotogravure as it was invented by the late Karl Klietsch, for the reason that his method applies ink to paper in quantity and quality not approached by any other photomechanical method. Photo-engravers should study all they can about it. Once the method is intelligently handled there is going to be great demand for it.

Tint Plates by New Method

New York city is having an outbreak of the color printing of circular letterheads, illustrations, labels, etc., with varicolored backgrounds made by a novel, patented method of producing tints without employing photoengraving or the cutting of the plates themselves. Several circulars and queries have come in asking about this method.

Answer.—George H. Brown, the manager of Typodex, as the new invention is called, was kind enough to demonstrate the process for transmission to our readers. It should be admitted that the method is almost impossible to de-

scribe in words; it and the results obtained must be seen to be understood. It involves a new idea applied to ordinary presswork. A few years ago "Sam" Ditman showed flat-color printing on a sheet previously printed from a black key plate. All the flat colors came from the same zinc tint plate inked with one color at a time, the area of each color depending on the pressure on the back of sheet during printing of the heavy overlay cut for that color. Typodex employs an improved Ditman principle besides using a grain tint instead of a flat color. This new idea is being taken up rapidly by printers and will soon be in common use. The license and materials are supplied by Typodex, Newton, Mass., and inquiries are invited.

The Theory of Halftone

A. J. Bull, M. Sc., P. R. P. S., in a recent lecture before the Royal Photographic Society, London, explained the principles of halftone negative making so lucidly that it is given here for the use of those who are called upon to describe it. He said in part:

"The process known as 'halftone' has for its object the translation of light and shade in continuous tone into a pattern of dots, which lends itself to typographic printing and also lithographic printing. . . . The translation from continuous to discontinuous tone is effected through the agency of a penumbral shadow of a cross-line screen. . . . The screen consists of two sets of opaque lines crossing each other at right angles, and of such width that they are equal to the spaces between them. Three-quarters of the light falling upon the screen is thus obstructed; it is the light which finds its way through the square holes that produces the photographic negative image. The screen is held parallel to the photoplate, and at such a distance in front of it that the full illumination from the diaphragm of the camera lens is only permitted to reach one minute area immediately under the center of each screen aperture, while from this maximum of illumination there is a penumbral shadow, so that the illumination

falls away in all directions on the surface of the photo-plate. . . .

"Since a photo-plate in the camera receives various exposures in its different parts, so when a picture is projected through a screen of this type continuous variation of tone from point to point will be replaced by a number of dots which vary in size. . . . The sharpness of the outline of the dot depends on the characteristic of the photo-plate, but by means of suitable reduction and intensification the edges of the dot can be sharpened until the effect is almost stencil-like."

Chromium-Plated Printing Surfaces

England and Germany are leading us in the surfacing of all kinds of printing plates with chromium, which is so many times harder than steel. Advertisements of chromium-facing equipment and its installation are found in the trade papers, the advertisements claiming that, "providing the proper plant is installed and the correct solutions employed, chromium plating is simplicity itself." Other advertisements read, "Try chromium zincos (the English name for line or halftone engravings on zinc). Their surface is harder than steel and entirely non-corrosive." This last statement being true, then much photoengraving should henceforth be done on zinc instead of copper. Photoengravers with electrotyping as an annex should soon be delivering zinc engravings chromium faced. Who will be the first to announce it?

Offset Without Water or Blankets

Joseph Rosenthal presented before the Cincinnati Club of Printing House Craftsmen some observations recently made in Germany. He said that this spring the Academy will announce the results of research they have been conducting which promises to revolutionize printing in regard to plates, rollers, and offset printing without water or blankets. They have an "alumina plate" which they claim will outwear any other, and an ink roller that is almost indestructible, while it can be used for all purposes in all seasons.

Planographic Pantone Progress

The latest news regarding Pantone, that wonderful planographic printing plate that is as smooth as a polished mirror, is that it is now being tried out on a newspaper press and will print 20,000 an hour. Its use has spread to Belgium, Prague, Munich, and Vienna, and in London, where it originated. The latest exhibits of Pantone that have been received show much improvement over the earlier ones.

Anaglyphs Invented by Ducos du Hauron

"Advertising Agency," New York, writes: "One of our clients wants some circulars with the illustrations printed in red and green, out of register, so as to look like a mess until viewed with red and green spectacles when they will appear in true stereoscopic effect. The London *Illustrated News* made quite a hit with such two-color illustrations a few years ago. A Chicago firm claims to have the sole rights to do this and our photoengraver suggests that we ask you about it."

Answer.—This query was answered in this department years ago, but the date is not at hand. This can be said about the principle of the method. It was foreshadowed by de Rollmann in 1853, projected on a screen by d'Almeida in 1858, but perfected by Alcide Ducos du Hauron over fifty years ago. In Woodbury's "Dictionary of Photography," New York, 1898, page 33, Anaglyph is described as a stereoscopic picture, the invention of Ducos du Hauron, consisting of two images printed one over the other in two colors. The images are not printed on the same place, but overlap about a quarter of an inch. On viewing this double image through a pair of eyeglasses, one blue and the other red, the image is seen stereoscopically. Then follows an explanation of the optical principles involved.

Now if you turn to U. S. Patent No. 1,386,720, of August 9, 1921, granted to Alfred J. Macy, Chicago, you will find claim 4: "A stereogram having two overlapping stereographic components in different colors, these portions of the stereogram which are intended to show an object in the plane of the stereogram having the stereographic components in register and other portions having them out of register." One would think that a patent office examiner would consult a photographic dictionary to determine whether an invention is novel, and still the present writer, as a witness, has shown in several patent cases that alleged inventions were so often anticipated by others as presented in the records.

Intensifying Dry Film Negatives

"Photoengraver" asks: "Part of my job is to make contrasty Velox prints from roll film negatives. Sometimes the negatives are undertimed and I should like to know how to intensify them as I do wet plates without staining, which too often happens. I use the regular copper-silver intensifier. Can you help me with an intensifier that will not stain?"

Answer.—Stains come from insufficient washing of the gelatine film negative after fixing, and also because of the presence in the fixing bath of other chemicals than pure hypo. Try a plain hypo bath for fixing. Fix thoroughly and wash the film under the tap for at least five minutes. You can not hurry this washing as you can a wet collodion plate. Instead of your customary copper and silver intensifier use mercury chlorid, about ¼ ounce, and potassium bromid, ¼ ounce to perhaps 8 to 10 ounces of water. Bleach the negative through to the back and then blacken it with dilute ammonia in the proportion of 1 dram to an ounce of water. For greater intensity you can use silver nitrate in the following proportions: Silver nitrate, 20 grains dissolved in 1 ounce of water; 20 grains of potassium or sodium cyanid in an ounce of water. While stirring the silver solution with a glass rod pour in the cyanid solution, which will throw down a precipitate, which filter out and blacken the negative with this silver solution. This should give great intensity without stain.

More Color Plates Wanted

We think we are living in a color age, to judge from milady's summer gowns, the new autos, the posters on the boards, and the variegated hues of the news-stands, but we are only beginning the use of engraving for color printing. Since 1892, when James Gordon Bennett ordered the writer to watch the construction of the web color press Hoe was building for him so that I might make the engravings for it to print in color, such web perfecting presses have increased in importance until the present day, when one of them weighs ninety tons. It is now found that a small press to print sheets 17 x 22 in four colors is much needed, and a press manufacturer has undertaken to supply that want. Hot and cold blasts of air on the sheet will dry the ink between impressions so there will be no blurring or offset. This means more and still more photoengraving for color printing, so we should be prepared for it.

That Overworked Word, "Process"

Andrew Dargavel, president of the Federation of Master Process Engravers, England, speaking at the annual festival of the Process Club, London, said: "We are apt to think that ours is the only *process* under the sun, not to speak of the stars; whereas many other processes are going on all around us, and to be honest we have no copy-right on the word. There are so many processes at work in the world today

that it is difficult to understand how the word came to attach itself to our particular industry."

Mr. Dargavel is right about the misuse of this much-abused word "process." *The Century Dictionary* requires over a page to list some of the applications of "process" to astronomy, chemistry, manufactures, law, etc. The word "process" is not given recognition in the glossary of terms adopted by the American Photo-Engravers Association. We photoengravers make line engravings, usually on zinc, sometimes on copper. We make halftones for relief printing and occasionally for intaglio, or plate printing. Highlight

halftones are those with the highlights eliminated. Duographs and duotypes are different methods of making halftones for two printings. When it comes to line engravings for color printing we can prepare them for printing in flat colors or with tints by using Ben Day media. For reproductions of paintings, water colors, or other copy in colors, we make sets of halftones for printing in three, four, or more printings, and to these has unfortunately been applied the term "process work." There would be fewer misunderstandings between buyers and salesmen if the proper engraving terms were used and the term "process" given a rest.

Karl Klietsch, Inventor of Photogravure and Rotagravure

By Prof. KARL ALBERT, Vienna, 1927

THE INLAND PRINTER can take the credit for publishing, in December, 1908, the first article on rotagravure; for searching out the real inventor later; for giving his name the correct English spelling, "Klietsch" instead of "Klic"; for recognizing in him one of the great geniuses of his time, and showing this in an appreciation of these pages, April, 1925, pages 64 and 65, these becoming the source of his many obituaries.

From Prof. Karl Albert, Vienna, comes for review an intimate biography which gives one an idea of what a modest, lovable character was this artist and photomechanical genius. The twenty-five full page photogravure illustrations in the sixty-three-page book were made by students under Dr. Rudolf Junk at the *Graphischen Lehr und Versuchsanstalt* in Vienna. The proceeds from the sale of the book go to the students' fund.

Karl Klietsch was born in the village of Arnau, Bohemia, May 31, 1841. His father was a chemist who insisted on young Karl studying chemistry, though his mind was on drawing and painting. He became an honor student at the Academy at Prague. At fourteen he sold portraits and landscapes which he had painted, and finally he left school and became a roving portrait painter. His father failed in business, and Karl was compelled to return home. They opened a photograph studio at Brunn which he conducted until 1866.

He became popular as a cartoonist, signing them "C. Meixner." The cartoon work brought him to Vienna, where he published a "comic" paper

illustrated with wood cuts engraved by himself. This led Klietsch to study photomechanical methods in the hope of superseding wood-cutting.

To rest his right hand when painting he learned to use the left one, and devised a double-pointed pen to draw backgrounds with more speed. He began to experiment for a method of printing photographs in a permanent printing ink, and after years of discouragement he discovered photogravure. His first successful print is dated January 1, 1878.

In 1879, Klietsch received the Voightlander medal for photogravures which he exhibited in Vienna, October 7, 1879. The next year he received a medal of the First Class at Ghent, Belgium. Not believing in patent protection he sold photogravure as a secret. In 1882 he worked in Belgium and later with Braun, Clement & Co., Paris. His work here was acclaimed by the art world everywhere. He never wrote a description of his inventions as far as the present biographer could find.

A man from Boston, Massachusetts, bought the photogravure process from Klietsch, giving him 10,000 Austrian gulden for it. Five years later Klietsch was surprised by receiving an equal amount from Boston to express their appreciation of photogravure and its value to them. (Name and date are not given, though a letter from Klietsch to the writer, dated October 11, 1922, relates the whole transaction.)

In the summer of 1890, Klietsch began correspondence with the Storey Bros., Lancaster, England, and in November he signed an agreement with them by which he was to demonstrate

his new invention, rotagravure. In December, 1890, he etched a portrait on a copper cylinder for them, and rotagravure was born. The first power rotagravure press was not installed until October 11, 1893, and on August 7, 1895, the Rembrandt Intaglio Printing Co., Ltd., was founded.

Here began rotagravure in colors which are so eagerly sought today. Klietsch was above all an artist and opposed to mass production. The rotagravure supplements which accompany our Sunday newspapers, and which the present writer would forward him on occasion, must have displeased him, not because he was getting no reward for his invention, but because his dream had been to reserve rotagravure for art reproductions exclusively.

While in England in 1899 he worked out a method for printing linoleum which he later sold to a German firm, and it is probably the method now in universal use. As told in *THE INLAND PRINTER*, June, 1927, page 438, it was undoubtedly Klietsch who gave us the name "Halbton" in *Photographische Correspondenz* in 1877. In our publication for January, 1927, pages 614-15, is an illustrated story of the passing of Karl Klietsch, November 26, 1926, and to which the reader is referred.

A Distinguished Frontispiece

The reproduction of the painting of a "Vollendammer" by the Enschedé intaglio process, shown opposite page 65, is a splendid exhibit of what can be done with rotagravure in three printings. It is difficult to understand how yellow, red, and blue inks can produce the warm black shown in the cap, or that the blue ink in the background is the same as that used in the type titles. The chief charm of rotagravure is the depth and velvety richness of color it gives and this color should always be a dull mat to be most effective. The addition of varnish to give rotagravure ink a gloss is fatal. The postage stamps of Holland are prized among collectors for their strength and brilliancy. They have for many years been engraved and printed by the great house of Jno. Enschedé en Zonen, Haarlem, Holland, who supplied this insert, so that rotagravure is but a branch of their intaglio engraving and printing business. In this connection it is of some historical interest to state that two decades ago *THE INLAND PRINTER* was the first to print a reproduction of a painted portrait by rotagravure in colors. It was "The Man at the Telephone" and will be found in the December, 1908, issue.

Printing and Air Traffic

By J. E. BULLARD

AIR traffic may seem to have little direct connection with printing. But consider what sort and quantity of direct-mail advertising was done before the days of the railroads and the motor vehicles. The fact that virtually no direct-mail advertising was carried on then was due largely to the inadequacy of the transportation systems. A local dealer could have circulars printed and deliver these to the homes of the people in his community and get good results, but a concern at a distance could not use printed matter to any great degree and get good returns because it could neither get them distributed fast enough nor be able to deliver the goods promptly. Mail-order houses were not possible until there were railroads.

When Profit Relies on Quick Turnover

We are now reaching a point, however, where direct-mail advertising promises to be much more effective than it has ever been before. Take, for example, a manufacturer who produces a novelty that gives promise of a big demand but a temporary one. It may be some article of jewelry, a hat, or anything else. His problem is to make his product known to the largest possible number of dealers in the shortest possible time, and have it on sale by as many dealers as possible with the least possible delay.

A few years ago the territory this manufacturer could cover was greatly limited. If he was located on the Atlantic Coast it required a week for mail matter to reach the Pacific Coast; if an order was immediately telegraphed back another week was required to get the goods to their destination. If the article had a vogue which could not be expected to last more than a month or two at the most, it was impractical to try to sell in the Pacific Coast market.

How different the possibilities are today! The novelty is designed. It is of a seasonable nature and will enjoy but a short though an exceedingly good demand. The problem is to place it before as many dealers as possible at once.

By Printing Press and Airplane

A mailing piece is worked out and the required number rushed off the press, those going to the more distant parts of the country being sent by air mail and those to nearby sections by regular mail. Within forty-eight hours

after the printing is done every dealer in the United States is informed of this novelty and urged to wire in his orders. As the orders come in they are shipped by the most expeditious mode of transportation. Those in the vicinity go by motor truck, those somewhat farther away go by railroad express. Those the most distant go by air express. The entire country is covered with the novelty, and in every section where sales are possible it is on display in less time than required to travel by railroad the greatest distance covered.

It is obvious that many concerns which in the past have not used direct-mail advertising extensively can be persuaded to make wider use of it under these circumstances. The direct-mail matter enables them to secure business they probably could not secure in any other way. By utilizing the air mail a much wider area can be covered, and the direct-mail matter proves the quickest way of reaching all possible prospects as well as probably the least expensive and the most effective.

Though the air-mail rates are now relatively high and this adds materially to the postage for the distant points, air postage is bound to be reduced as the volume of mail matter carried by the air lines increases. As a matter of fact, the time is pretty sure to come when it will be but little higher than regular postage. As the planes carry more passengers and freight, and as they more nearly approach capacity loadings for every trip, the cost will inevitably be reduced.

The increased speed and time saved make the air mail worth materially more where time is an important factor, and thus worth the higher rate.

Progress in Aviation

Rapid progress is being made in aviation, and this means of transportation offers rich possibilities for business. During 1927 the airplane miles flown in the United States were nearly twice the total mileage for the world in 1926. During 1928, judging from the output of the airplane factories, the greatly increased number of landing fields and airports, the new air lines that are being established, and the constantly increasing air taxi business that is being done, it is possible that the airplane mileage will be double that of 1927.

In other words, air traffic is increasing by leaps and bounds and is being used in an increasing number of ways.

For example take such a case as this. Strawberry growers in some section of the country find that unexpected weather conditions are ripening a larger quantity of berries than can be marketed with profit in the regular markets. If all the berries ready to be picked are thrown on the local market, prices will drop to a point where there will be no profit for the growers, and may drop so far as to yield a net loss. If they are not picked they are wasted.

Misfortune to Profit

Under past conditions of doing business these growers would be helpless; they would simply have to accept their losses. With the printing presses ready and airplanes waiting, however, there are possibilities of turning this seeming misfortune into a profit.

Of course, the growers have some sort of an association. The officers of this association get together, realizing that they must act quickly to solve the problem. The berries must be picked and shipped within a matter of hours.

Telegrams could be sent to different markets, but this would be expensive and take considerable time. Accordingly, a visit is made to the leading printer in the community. A mailing card or other printed matter is decided upon, and this is rushed from the press and mailed that very day.

Shipment by Air

Most of the mailing is sent by air mail, and by next morning possible customers in sections where there is no overproduction of strawberries are informed that wired orders will be filled and shipped by air. Distances that by rail transportation would be entirely out of the question are reached, and enough orders are secured to take care of the surplus at a price that will show the growers a net. The local market is not flooded, and instead of having an unprofitable season these growers have a good one that shows them more than the ordinary amount of total profit.

Without the printing press, and without air transportation, it would not have been possible to have avoided a serious loss on these strawberries. The printer was needed to assist in informing the greatest number of people.

A case such as this shows that the airplane makes it possible for the printer to get business in some cases where otherwise the only course would be to use the telegraph. The speed of the mail is increased to such a point that a mailing piece which tells the story more completely arrives in time at its destination and makes it possible to reach far more people at reasonable cost than by wire.

In other words, the airplane, carrying mailing pieces quicker and over longer distances and by transporting certain kinds of relatively high-price-a-pound commodities, opens a new field for printed matter. Many selling problems can be solved in this way, and naturally the printer who shows his customers how they can be solved is going to get their business in satisfying quantity.

Air transportation is such a new thing (having received very little general public attention until the summer of 1927) that most people fail to realize its importance or how it can be used to solve some of their own business problems. Yet in virtually every community some business man is confronted by a problem that can best be solved by a combination of printing and air transportation.

Possibilities in Many Lines

By making a study of the problems of his customers and those of other business men in town, the printer may discover cases where he can get business that would not even exist were it not for the feasibility of using air transportation for mail matter and goods. Very frequently, as in the instance of the strawberries, the speed with which goods are moved makes all the difference between a very pleasing profit and a loss that can not be forgotten easily.

Some goods are of a perishable nature as far as profits are concerned because they are seasonable, some because they decay within a short time. Quick action, and that alone, can avoid losses. Merchants, manufacturers, growers are all faced with such problems. Then there are goods which will show a profit if they can be distributed quickly enough over an area so wide that a worthwhile volume is removed from the producer's stock.

Quick Distribution Vital

More of these goods are now being manufactured than was once the case. Style and color are playing a more important part in merchandise than ever before, and there is a tendency for quicker changes in styles. These changes may not be great, but they make it very important to get as quick a distribution of the new styles as is possible.

The printer can help much in getting this quick distribution. In fact, without his help it is impossible to get the quickest possible distribution. Logically the airplane can be made to increase the amount of printing business available to the alert printer who goes after it intelligently and persistently.

Lower Costs Come From Better Driving

By DONALD A. HAMPSON

Member Board of Advisory Engineers, Power Transmission Association

NEARLY every machine used in the printing and allied trades is driven, through belting, from an electric motor placed in a convenient location a few feet away. Very few machines have direct-connected motors, and the old-time printing "office" with its line shafting has practically disappeared. In fact, printing is the most completely motorized of the great industries, and the universal drive is the "short-center" belt, so called because the motors are placed close to the machine pulleys.

Although steeped in a splendid cost system, printers still have overlooked the high cost of these short-center drives, either because the losses have crept up insidiously or because they have been considered as necessary evils.

Decreased Production Through Slippage

A little study will disclose hitherto unsuspected losses such as decreased production through slowed machine speeds, frequent renewal of belts, delayed schedules due to belt troubles, and labor charges for constant repair of joints and laps. Slippage is responsible for much of the trouble, while the belt itself, the pulleys, and the manner of installation make up the rest. This considerable total of losses is swallowed up in that monetary waste basket known as "overhead."

Suppose, for example, that a printer buys a new press and it is delivered to his floor. A motor has been secured meanwhile from another source. Both are high-class products, capable of delivering their rated output without question. When set in position the two machines are joined by a piece of used belting found lying around the shop or a new piece that was bought at a hardware store around the corner.

It is a typical case. The belt, if an old one, has a curled edge and some frayed laps, or, if a new one, there is a thump on the pulleys every time the crudely made joint strikes. The shiny belt slips audibly on the pulleys.

Wasting 180 Impressions an Hour

Assuming only five per cent of unnecessary slip, there is a loss of one hundred and eighty impressions an hour on a press that is supposed to do

3,600. The printer is paying for 3,600, but not getting them. If any one is aware of the loss, the remedy applied is to tighten the belt so much that bearing friction overcomes the anticipated gain. And in many cases, soap, rosin, or stick dressing is forced against the belt's surface, a temporary help only.

Print shop drives present a problem of their own, but an adherence to simple rules will work wonders in the direction of lowered costs and increased efficiency. In other fields the greater distance between pulleys causes the belt to hug the pulleys better because of normal sag, and the belt has a chance to adjust itself to misalignments. Print shop short centers are not so much of a disadvantage when other points are taken care of. The ten golden rules for successful transmission of power under these conditions are:

1. Run belts with grain side next to pulleys.
2. Use a cemented, endless belt.
3. Select a belt of high adhesive surface.
4. Don't try to get by with a narrow belt.
5. Have neither sagging nor fiddle-string tightness.
6. Keep belts and pulleys clean.
7. Run the lower side toward the motor.
8. Use paper pulleys on motors.
9. Pulley surface should be straight or nearly so.
10. Motor and machine pulleys should line up.

Some of these rules have been common property for years; others have been deduced from research and experiment upon the materials concerned and applications under all modern operating conditions. They are especially worthy of study for small-power drives such as are found in the printing industry, using motors from one-quarter horse-power up. No knowledge whatever of transmission theory is required to secure the benefits from application of these rules, but some amplification is in order.

Correct Belt Application

Common usage notwithstanding, the correct way for a belt to be applied is to place the hair side next to the pulleys. Knowing that a soft surface clings better than a hard one, undirected persons place the flesh side next to pulleys through the natural conclusion that the

hard, smooth hair side will not pull as well as the other. Much of this hard finish is a manufacturer's trick to sell a conventional belt to uninformed persons, and the hardness is but temporary. After a few days' running, the grain side will pull about twenty per cent more than the flesh side. Merely reversing the belt, in cases of wrong application, will increase the power.

A belt that is free from joints is to be preferred in every case, and it is within the reach of every printer. These short belts are small enough to be mailed and their cost is slight. Belt factories are so well distributed that every section of the country is handy to one or more and thus may obtain quick service. An endless belt should be made at the factory or a factory branch.

Endless Belts Have More Power

Experiments conducted by the author show that a continuous leather surface on a pulley has a far greater pulling power than the same surface when broken by a joint and fastened by metallic means. According to the tightness with which the belt was applied, this power was from twenty to fifty per cent greater for the endless section. With short-center drives, belt fastenings are in contact with the two pulleys so much of the time that they seriously affect transmission.

The power a belt will transmit is in direct proportion to its width. The width to use for driving a machine in the printing and allied trades may be obtained from the makers of the machine or from the motor manufacturers. The width of pulley on the machine is often a limiting factor. It is cheapest in the end to start out with the widest belt the pulleys will take, for wide belts mean less slippage, longer life, and decreased loads on bearings.

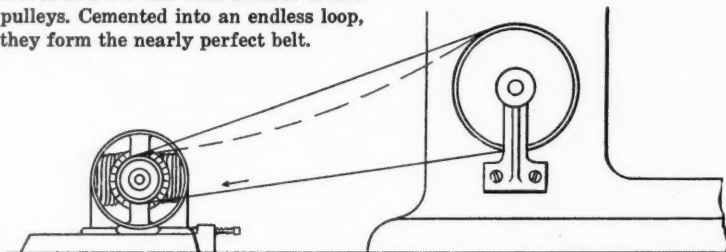
The Quality of Belts

Soft belts have a better gripping surface than stiffer ones, but whether a belt is soft because of high quality or low is a hard question for the printer to decide. Belts sold in general stores are apt to be low grade — all right for farmers, perhaps, but of poor adhesive and driving qualities and of such soft leather that they stretch month after month. First-quality belts are made from a strip fifteen inches wide cut from the center of the hide and extending from the neck toward the tail, but not including either. These belts have the least stretch, the longest life, and the maximum of pulling power. Belts made from other portions of the hide sell for less because they are worth less.

The one way to get value for the belt dollar is to buy from a manufacturer,

buying the belt that he recommends for the particular purpose, speed, and pulley sizes that are given him. For one or two dollars more, a belt that is really adapted to severe conditions may be obtained, and this belt will return that dollar many times a week in increased production and freedom from troubles.

Belts that are known as "mineral tanned" or "chrome leather," and as "combination tannage," are softer and more adhesive on small pulleys than common oak tanned leather belts. Competent engineering advice will specify these belts for many of the short-center drives and for use with smaller motor pulleys. Cemented into an endless loop, they form the nearly perfect belt.



Typical Print Shop Short-Center Drive

All too many men think that a belt must be taut as a drumhead to be applied correctly. This is wrong; it is ruinous to belts and wasteful of power. On a two-inch belt, for example, a tension of fifty to sixty pounds is the most practical, considering adhesion and longevity. This tension is not excessive, as may be imagined. It might be visualized by stating that this is a tension that would take out all but one-eighth inch of sag on the tight side between pulleys centered four feet apart.

The drawing shows a typical layout. The tight or driving side is at the bottom, and that side is running toward the motor pulley. As soon as the load is applied the lower side is drawn practically straight, but the upper side sags considerably due to the accumulated stretch, slippage, and creep. In sagging, it assumes the position shown exaggeratedly by the dotted line and, in so doing, it encompasses more of each pulley's surface, and adds to the grip.

Neatsfoot Oil Is Best

Belts should never be clogged with inert substances to make them pull. If the belts are soft, clean, of normal tension, and well lubricated, they will deliver without "stickums." In tanning, the oil which the animal once supplied is lost and the natural lubrication of the fibers must be restored by occasional applications of neatsfoot oil or its equivalent in cartoned derivatives.

The motor pulley has a most important part to play in belted drives. Invariably it is the smaller pulley, and so

it is the one on which slippage would occur. Starting with this fact, the author conducted extensive tests to learn what was the best pulley to use for small-power, short-center drives. Pulleys from three inches to five inches were employed to test belt adhesion under identical conditions.

It was found that paper pulleys had from twenty-five to sixty per cent greater adhesion than iron pulleys. New paper pulleys did not have the grip of those which had been in use long enough to get lapped to a smoother surface. As most print shop drives are with

motor pulleys of from three to five inches, it would be profitable to change existing metal pulleys and get the benefits of paper. Motor manufacturers recognize this difference and supply paper pulleys on most small motors.

Overdoing the Crown

Where metal pulleys are in use and a substitution can not be made, better results may often be obtained by a slight change in surface. It is customary to "crown" the face of a pulley to make the belt run centrally. This crowned face is carried to an extreme in many cases and a distinct loss of grip is suffered.

The pulley with straight face will transmit much more power than the crowned, therefore the amount of crown should be reduced by turning off metal there and leaving a difference of approximately one-thirty-second inch in diameter. If a belt is going to slip, it will slip as quickly from a crowned pulley as from a straight one.

A careful review of the facts given above will show that successful belt driving is a matter of looking after minor (?) details. They are details within the skill and exchequer of every printer — details that pay big returns. A printer whose feeder skipped one sheet out of fifty would have the machine fixed at once, because it would pay him to do so. But it would be more profitable to fix the belt that was driving the feeder. Losses in power transmission are both cumulative and progressive — cancers in a healthy plant.

SPECIMEN REVIEW

By J. L. FRAZIER

Printing submitted for review in this department must be mailed flat, not rolled, and marked "For Criticism." Replies can not be made by mail.

H. D. L. NIDERMAIER, Bristol, Tennessee.—*King's Courier* continues to be one of the most effective of printers' house-organs. The cover for Volume 7, Number 7, printed in black and deep wine color on light green stock, is unusually fine. The deep red is used on a reversed plate through two openings in which the green stock shows through, giving the impression of green and black printing on deep wine-colored stock. *Bunting's Quill* is another unusually effective house-organ; in it the remarkably readable face, Bookman, is used with good effect. This face can also create a pleasing and inviting appearance, as you demonstrate. It is rather unfair, however, to single out the specimens mentioned above, for all the work, with the single exception of the bookmarks, which in most instances are more ornate than even this class of work justifies, equals the best of the kind. The use of borders and ornaments on these bookmarks, even though excessive, is rather skilful, however, and when printed in two colors, as you suggest, the designs would prove much more satisfactory than the proofs in black only suggest.

E. M. DIAMANT, New York city.—Your "Book of Alphabets" is one of the most ingenious items we have seen. Printed for the large fraternity of artists and layout men who have to produce typographic layouts speedily, the letters are printed on one side of the sheet which is perforated in square sections around each letter so the layout man may tear out the one he wants and either trace or paste it onto his layouts. An exceptionally fine showing is not only made of your various fonts, which, by the way, are of the highest grade, but the practical utility of the book will cause all recipients to appreciate it above any ordinary type book. The cover, striped vertically in gold and black, is decidedly impressive. The title line, "Diamant Type," printed in black, appears vertically in two of the gold stripes.

JOHN A. ATKINS, Christchurch, New Zealand.—Considered as "everyday work" and of a character that does not permit spreading oneself, the items you submit are quite good. Display and layout are thoroughly satisfactory; in fact, what the specimens lack of complete effectiveness is due almost entirely to the type faces, rather than to defects in composition. These are not serious, considering the character of the work. Where the Caslon and the attractive highlight face are used the appearance is good, and, although the samples in Cheltenham Bold are not all they would be if Goudy Bold or Cloister Bold were similarly used, the work in that face is otherwise good. As a rule, however, words are too widely spaced. You should avoid too narrow measures, for in limiting the number of words in a line—over which space may be distributed—an unusual amount of space between words is often unavoidable. Lines, on the other hand, are often too closely spaced, particularly on some of the

business cards, set mostly in capitals. The title of the Federal Golf Club dinner program and the title of the folder, "A Unique Collection of Italian Art," are especially interesting. Display and arrangement are very well handled on all specimens in this large collection.

JOHNSTON PRINTING AND ADVERTISING COMPANY, Dallas.—The cover of the book, "The Golden Year," is inconsistent with the excellent inside pages. Printed in gold and black, the gold predominating, on a rather dark gray cover stock of green hue, the type does not stand out at all effectively. It is also difficult to read. The design is weak as a result of the use of so much gold, also because the arrangement is loose and scattered. If the colors were reversed and black were used where gold now appears, the effect would be much more satisfactory. The

frontispiece is attractive and effective, as are also the text pages—in the main essentials. The Cursive initial at the opening of the text on page 5 is too weak in tone for the Kennerley of the text. We suggest that the inner border in black could have been omitted to good advantage; the outer and regular page border printed in green is unusually good. The decorative unit somewhat above the center of the border at the sides detracts from the general appearance of the page and is so prominent as isolated that it draws attention from the type. Mr. Borak's card is original and attractive, and the menu-program booklet for the John Lynch Lancaster dinner is very fine. We do not, however, like swash characters in the middle of a word, as in "Banquet" on the title page. The Q is particularly objectionable. Except that we believe some color would be preferable to the gold of the decoration on the cover, the Smith & Whitney book is the best of the lot, the typography inside being especially fine. Clean printing distinguishes all the work; your pressman has done an exceptionally fine job.

THE OSAGE PRINTER, Pawhuska, Oklahoma.—The linoleum block illustration on your Christmas greeting is exceptionally fine, but the typography is not in keeping. In the first place, and as a mass, it is too weak in relation to the cut, and the type faces are not stylish or readable. Parsons is a good face for occasional display use, particularly when there are only two or three lines in the design, and when those lines are relatively large, as, for instance, on letterheads and business cards. It is not at all satisfactory for text composition. The style should never be set wholly in capitals, as in the line, "The Osage Printer." The illustration is also somewhat too large in proportion; if it were smaller and the type larger, as well as more attractive, the item would be satisfactory. Your blotter, "Don't Fumble for a Blotter," is effective; it would be more so, though, if the two lines outside the panel at the top were centered instead of set flush on the left. Centering would permit using type of regular proportions for the main line and avoid the condensed face, which is inconsistent in shape with the other type in the design. While the circle in the center of the design undoubtedly stands for Osage, the connection is not plainly apparent and we doubt its decorative value. Since it draws considerable attention away from the message, of course, we suggest the inadvisability of its use, particularly since it takes up space that could be utilized in setting the text larger.

BIRMINGHAM LINOTYPE COMPOSITION COMPANY, Birmingham, Alabama.—The menu and program for the good fellowship banquet of the local master printers is fine. The first two lines of the title are spaced too closely; they are also somewhat small in relation to the size of the matter below the ornament and to the strength of the border. If it was



Uncommon division of form for colors; a specimen insert introducing the Margraff-Kursiv type of the Schriftguss foundry, Dresden, Germany. Because the series contains no overhanging characters, the foundry predicts for it a wider use than is ordinarily made of italics.

ZOO LOGISCHER GARTEN DER STADT FRANKFURT · MAIN

Eine der größten und vielseitigsten Sammlungen lebender Tiere des Kontinents · Berühmtes Aquarium · Schädlings-Abteilung · Neu eingetroffen: Riesen-Orang-Utang-Familie, Beisa-Antilopen, Nashorn-Baby, Giraffenweibchen · Vornehmes Gesellschaftshaus · Gute Restauration · Täglich abends Konzerte · Besondere Veranstaltungen

A striking layout is the outstanding feature of this leaflet from the Bauer foundry, Frankfurt, Germany, set in that company's latest type, "Futura."



A PAINTER and a PRINTER have a common bond in handling colors. Press room artistry speaks in fine color printing. With us it is a science and an art. May we send you a few examples of our work.

THE STIRLING PRESS
COLOR PRINTING
318-326 West 39th St., New York

large runs

Our automatic machinery is geared for volume production, and absorbs large runs at a substantial saving.

Nor does this interfere with the prompt execution of smaller orders.

THE STIRLING PRESS
Intelligent Co-operation
318-326 W. 39th St., New York City

"shoot first

—question afterward" used to be the old-time sheriff's slogan.

Ours is exactly the reverse. We've found that it saves a lot of money and misery to thrash out every printing question before the work goes to press.

This policy has paid its way countless times in the past 20 years.

The Stirling Press
318 WEST 39th STREET
NEW YORK

WHEN TIME IS PRECIOUS

the full resources of our plant are brought into action to meet the date of delivery.

In many instances our presses continue their work through the night, always keeping abreast of the schedule. ¶ Knowing our facilities, customers place every confidence in our promises.

THE STIRLING PRESS
A Complete Printing Plant
318 W. 39th St., New York City

considered desirable to have these lines no larger, the italic below the ornament should be smaller, because, as handled, the design is overbalanced at the bottom. The italic lines are too close together and there is too much space between words. Allowance should have been made for the flourishes of the swash initials in allotting space between words as these flourishes provide a certain amount on their body. The arrangement of names of members of the local club in the form of the letter "P" on the back page is quite ingenious. It creates interest, too. Colors are pleasing and presswork is quite satisfactory. The November Alabama Sportsman is very interesting, the makeup and headings of the text pages being very good. Flourishes at the ends of some lines could be omitted to advantage, likewise the bands and ornaments at the sides of the cut on the cover. The handling of the title is not wholly satisfactory; spacing between the lines is too close and the name line is letter spaced too widely. This is more noticeable because of the hole in the center of the third line, due to placing the date at the extreme left-hand side and the price at the right, as well as to the exceptionally close spacing of lines. If these two items were pulled together with only a small ornament or short dash between them the effect would be decidedly better. The illustration in colors is exceptionally well printed.

THE JAMES T. IGOE COMPANY, Chicago.—"Color Captures the Kitchen," executed by you for the Vollrath Company, is outstanding. The cover is unusual and striking. Reproductions of illustrations of enamel ware, on which process printing has not heretofore given the effective results it has on other merchandise, are in this booklet of yours given the correct hue and intensity of color by the use of water color inks applied by flat, unscreened plates on vellum stock. No process job could equal the result you have achieved. Nine colors are used to represent the various hues in which the line is offered.

GRAPHIC ARTS GUILD, Detroit.—One doesn't often see anything quite so original and distinctive as your folder, "The First Proof." The center spread is a knockout. The illustration in the upper left-hand corner, which is in colors, is shaped and outlined in the form of an artist's palette. To the right, in the lower right-hand corner, in fact, and adjoining

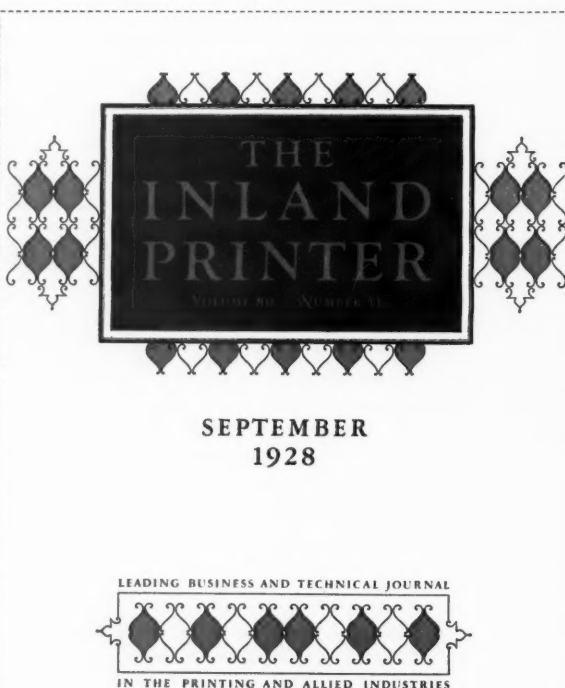
These advertisements of the Stirling Press, New York city, were only 11 by 20 picas, yet they stood out as few displays four times their size do. Skilful and original layout does the trick.

the illustration, the type matter appears similarly shaped. The signature and the address are clever extensions on an angle, representing the brush across and beneath the palette in the cut. Those who receive it and turn to the inside will be forcefully and favorably impressed, but the title page is so conventional in design some may not go farther and see the spread.

WILLIAM K. ALLEN, Chicago.—The announcement of the opening of your studio is excellent, the card tipped onto the second page being especially well designed. We believe the item would have proved more resultful if this card were tipped on the front below or above the title, "An Announcement." This would not only enhance the appearance where it counts most, but would bring your name and business at once to the attention of clients and prospects.

A. H. WILSON & Co., Boston.—"Beauty" is an interesting, unusual, and effective folder, the best part of which is the inside spread, where,

under the heading, "Every Type Talks . . . Choose them as you would words," are four large half-tone portraits of pretty girls interestingly placed in columns. A few lines of text like, for instance, "Exclusiveness: There is an air of unforced naturalness and delightful simplicity about Goudy Old Style," appear beneath each cut. The beauty of the thing is that the girls themselves and their expressions suggest the qualities mentioned as applying to the type faces, which makes the impression stronger and emphasizes the importance of type. While the front and back pages are rather too ornate, the handling is so skilful the effect is not objectionable. The New Haven folder, "Travel by Train," is unusually effective, as is also that road's menu folder, the front of which bears the words, "Help Save Old Ironsides," and a fine process print of the old ship. Despite what you say with respect to our criticism of the long initial "S" on a previous item, we can not see how it can be thought to improve the appearance and effectiveness of this page. One has to study the flourish to see that it is an "S"; it is indeed more of a flourish than a letter. The letters "ave" under the cut give the impression of standing alone, at least at first glance. We do not doubt that people, many, perhaps, commented upon the serpentine effect created by the use of the "S" in the previous instance. People often allow their interest in the ingenuity of some detail to disregard weaknesses in the whole that may more than offset the advantages of that ingenuity. Good results are often achieved from publicity that is far from perfect. We can not help but feel, furthermore, that the large initial printed in two colors on the second page handicaps the reading



This is quite the most original type-set cover ever sent in for THE INLAND PRINTER. The stock and colors of the original submitted by the designer, John J. Smith, of the Superior Typesetting Company, Chicago, add measurably to the effectiveness of the clever layout.

Here's A Lead:

The next time you are struggling with a sales idea that refuses to take tangible shape, get in touch with The Stirling Press.

We've helped many a user of Direct Advertising by visualizing his idea, creating copy and art work and finally producing the printed piece. The guiding principle is always to develop more sales for you.

THE STIRLING PRESS
Direct Advertising
318 W. 39th Street, New York City

A good number of the large business houses we serve today were struggling for a place in the sun when we first began to work with them.

Our growth has paralleled theirs. Perhaps because we contributed a bit to their progress or that we simply kept on giving a Square Deal.

THE Stirling PRESS
318 West 39th Street,
New York City

We're never too busy to have our customers come in and go over proofs or confer with us on any phase of their printing.

A special conference room is reserved for this purpose. Advice and assistance are always at hand from the heads of our various departments.

THE STIRLING PRESS
318 WEST 39TH ST.
NEW YORK CITY

EXTRA DIVIDENDS

in the shape of Sales Results depend largely on shrewd investment in Direct Advertising. Our experience combined with your knowledge of your market, can go far toward creating profitable returns.

THE Stirling PRESS
318 West 39th Street
New York City

of the message. We will pass the position of the initial, a large block almost independent of the text, however, in deference to the possible advantage of its novelty and distinction, the value of which we doubt.

HENRY CONOLLY, Rochester, New York.—"The Rochester Savings Bank" is an unusually handsome booklet. The illustrations are remarkably good and are finely printed in colors. The title page seems top-heavy and the small group on the facing page, although above center, is a shade too low. Inside margins are somewhat too wide, especially in relation to the others. The excellence of the typography and printing makes this fault seem of little consequence.

JOHN CARDWELL, Hawera, New Zealand.—Your work varies from rather good to bad, the feature most frequently detrimental being an excessive use of rules and ornaments. Take the cover of the Egmont Racing Club book of rules as a case in point. If the ornament and horizontal rule surmounting it were supplanted by a very small spot placed about two picas below the word "incorporated" it would rate good. Display and arrangement are satisfactory and a good type face is used. Underscoring the largest lines of a design, as on the title of the Elite menu folder, is also bad; if these rules and the ornament were omitted and the two main lines were spaced closer together, the page would be fine. In like manner the "Ponga and Puhihua" cover is over-ornate. The panel of rules and the six ornamental units they enclose should be omitted and only one of the ornaments, placed vertically, used between the two type groups. This would then be a commendable page, provided, also, the second line of the main group were not letter spaced as it is; in fact, allowed to remain natural length. Most of the squaring up of type that is done is harmful instead of helpful. We will be glad to see more of your work after you have put the soft pedal on the now too extensive use of ornaments.

S. W. WILLISTON, Chicago.—In the main the specimens you submit are above the average of the general run of small commercial forms. You have a very good sense for form and display values; in fact, the only things we feel you need to watch are spacing and the association of unrelated types. Spacing is usually too close between lines and too wide, sometimes, between words. The combination of the gothic and Kennerley on the Birchwood laundry price list is especially bad. If an initial had been used as ornament at the start instead of the ornamental brackets alongside the lines in gothic the whole item would be better. The initial is particularly justified because there is no headline. Some of the forms done wholly in this gothic face, your own stationery, for instance, are impressive.

NATIONAL TYPESETTING COMPANY, St. Louis.—Your new type specimen book is excellent; the type faces shown are consistent.

NORMAN T. A. MUNDER & Co., Baltimore.—Any Munder item is bound to be exceptional, but the brochure, "A Living Museum," is outstanding among the finest typography and

More of the outstanding Stirling Press advertisements. Our reproductions have been made from a booklet in which thirty of the series are reprinted and which is quite as excellent and unusual as the advertisements.

printing. The cover is notable for the extremely small spots of different colors which, although almost invisible to the naked eye, are registered to micrometer perfection. The relationship of



Garamond Number

Spring 1928



Cover of the Superior Typesetting Company's house-organ which shows that the cleverness of the firm's boss, as indicated by THE INLAND PRINTER cover on the preceding page, was not just a chance shot.

the colors is charming, too. The text in Caalon with marginal illustrations in light blue creates a very pleasing appearance on the toned antique paper. The booklet, "A Bulletin of the Phillips Collection," is likewise de luxe; the cover is especially impressive. Presswork on dull-coated stock is remarkable in its evenness and perfection of "color"; clean highlights and solid blacks distinguish the many halftones.

NOWAK BROTHERS, New York City.—Your new stationery forms are both interesting and attractive. Both color combinations, red with the brown and green with the brown, are good. The first is an analogous harmony and the second a harmony of contrast, between which one's preference is a matter of taste. The green in this case is at a disadvantage because it is too weak in tone value; if it were slightly stronger we would like it better than the red. Lines are rather too closely spaced on all forms.

C. W. HEK, Rustburg, Virginia.—Your work is very good, the book, "A New Cemetery for Lynchburg," being especially attractive. The design, cut and type together, is placed too high; the page is overbalanced at the top, around which, also, the margins are too unequal. The lines of Goudy Bold on the first spread of the Red Triangle "Spring Line" folder are too crowded; we suggest setting them in a smaller size, which would be adequate since there is no other matter on the page except the trade-mark device, which is printed in a light tint. The second spread is effective. We do not blame whoever was responsible for the changes on the Bowman resolutions that are evidenced by the three proofs sent us. The type is too large, particularly since it is a commercial style without the effect of class essential in items of the kind. The form is set up too much like an ordinary circular, hence doesn't create the effect of dignity and refinement it should. Resolutions ought to be fine enough to warrant framing. Word spacing is away too wide and the heading is decidedly ill-shaped. The word "Resolutions" should stand alone and dominate—certainly there is no reason or excuse for placing the word "adopted" on the first line; it is related to "by the" and with them forms a connecting line of no display importance. The name of the firm is too large, in fact, the title "Resolutions" and the name of Mr. Bowman are all that should stand out in a striking way.

THE W. A. SORIN COMPANY, Cincinnati.—You have done an excellent job on the program booklet for the Syrian Temple's ceremonial session. The cover, a full-page halftone illustrating an Arab seated beside his standing camel on the sand of the desert, is unusually effective. The tint under the halftone accentuates the aridity of the effect, although the illustration, with sand showing as far as one can see, does it well enough. Engraved in the halftone, double printed in reverse, the emblem of the Shrine appears in the lower left-hand corner. It is very effective, and more prominent than one would suspect. The typography of the text pages is excellent, as is also the presswork.

FOURSCORE and seven years ago our fathers brought forth on this continent a new Nation conceived in liberty and dedicated to the proposition that all men are created equal. Now we are engaged in a great civil war, testing whether that Nation, or any Nation so conceived and so dedicated, can long endure. We are met on a great battlefield of that war. We have come to dedicate a portion of that field as a final resting-place of those who here gave their lives that that Nation might live. It is altogether fitting and proper that we should do this. But in a larger sense, we cannot dedicate, we can not consecrate, we cannot hallow this ground. The brave men living and dead, who struggled here, have consecrated it, far above our poor power to add or detract. The world will little note, nor long remember what we say here, but it can never forget what they did here. It is for us, the living, rather to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced. It is rather for us to be here dedicated to the great task remaining before us—that from these honored dead we take increased devotion to that cause for which they gave the last full measure of devotion. That we here highly resolve that these dead shall not have died in vain—that this Nation, under God, shall have a new birth of freedom and that Government of the people, by the people, for the people, shall not perish from this earth.

Although exceptionally simple in the main essential of form, this spread from a folder by Bray & Beran, San Francisco, is the most unusual handling of Lincoln's famous address we have ever seen. The original in black and gold on old-looking hand-made paper is charming.

GERTH STUDIO, Minneapolis.—Except for the spotting up of the page by the leaf ornaments marking paragraphs—which, by the way, are not begun with caps.—the announcement headed "Here" is effective in a general sense. Beginning the sentences and paragraphs with lower-case letters is also decidedly confusing. In our opinion, the idea has no value in novelty to compensate for the unpleasing effect.

THOMAS P. HARDY COMPANY, Detroit.—Your type book is the largest and probably, also, finest any printer anywhere ever issued. Bound in a handsome loose-leaf cover of embossed leather effect, and full two inches thick, the book makes an impressive appearance and establishes your house as a leader in its field. The volume is completely indexed with extension tabs so one may turn in an instant to any face he wants to use. Another fine feature is the vertical pica ruling of the pages in light blue; this enables the user to determine quickly how many characters of a given size and style of type he can get in a line of given length. The book contains a showing of all the best types available today, and these are not only exceptionally well set as regards display, spacing, etc., but are printed perfectly. We are not surprised that people are coming to you more and more for ideas and advice on matters typographic and that the only instruction given you concerns the size of the page. It is not strange, furthermore, that you set magazine advertisements for General Motors and other large corporations that want the best.

THE MAPLE PRESS, York, Pennsylvania.—All specimens in your latest portfolio are exceptionally neat and uniformly attractive.

THE COMMANDAY-ROTH COMPANY, New York city.—The inside pages of the Cott-a-lap dealer catalog are exceptionally neat, also effective, and the illustrations in four-color process are remarkably well printed. The cover, however, is manifestly inconsistent with the excellence of the inside, which makes it especially noticeable.

ROBERT A. WILLIAMS, Evansville, Indiana.—Most of your specimens, distinguished by uncommon layouts, are full of character; there is more individuality about your work than is at all common.

Some of the specimens are faulty in detail. Your card in green and light olive on green stock is badly crowded, and the exceptional letter spacing of the line, "also operating the," is unpleasing. The line is also too prominent. The lines of the heading on the folder, "Why Didn't Jones Stay Sold?" are likewise crowded, while the Hinch announcement in Copperplate Gothic is asking too much of potential readers. No one will read such a mass of closely spaced caps. The letterhead for the Olive Dean Stationery Company, on the other hand, is strikingly effective, while the one for the Business Men's Association is a real Caslon masterpiece. The latter

illustrates the harmonious introduction of a line of Old English, printed in color.

W. G. FORCY, Pawhuska, Oklahoma.—You deserve a lot of praise. Your work ranks high in layout and display. While word spacing is usually too wide, most of the items that fall short do so in consequence of the type faces used, which may not be your fault. If, for instance, the text of the greeting for the Oklahoma Hotel were set in Caslon, like the signature, the item would be excellent, although spacing is here, also, too wide between words. The label for the *Journal-Capital* would be improved by pulling the address line to center with just a comma between the two parts; the gap of space in the center is unsightly. The italic initial is a blot on the otherwise effective blotter, "When It's Service," etc., not only because of the irritating slant of the letter, but because of the wide gap of space between the lower part and the start of the second line alongside. The wee Arabian Knights dance program is clever, as is the card which also features a linoleum block illustration in reverse, although the color is weak.

RAPID LITHOGRAPH COMPANY, Los Angeles.—Your new package label is unusually attractive, also quite striking. The quotation form, although less satisfactory, is very good, and quite unusual. It is convenient and business-like.

HAL. T. BENHAM, Indianapolis.—"Red Knickers" is an unusually attractive book, the paper covering the boards, a strong pattern in gold, black, and green, being especially striking. In view of this pronounced decoration the label ought to be plainer, in fact, without ornament. While composition of text in Caslon is pleasing, the appearance of the pages is weakened because the bottom margin is too narrow; the type page, in other words, is too long in relation to the depth of the paper page.

THE WEANT PRESS, Baltimore.—While the ticket for Sherry's New Year's celebration is interesting, it would be much more attractive if there were a simple rule border in orange instead of the squares at the corners, one of which is in black and the other in orange. Some layout that would result in a more general distribution of the white space seems necessary and the border suggested would effect an appearance of unity and form which the design now lacks. Lines are crowded up and down, yet a world of space is wasted along the sides, particularly in the center.

BARKER PRINTING COMPANY, Blackstone, Virginia.—Although arrangement is not always what it should be, the outstanding fault with your work is unsatisfactory type. Most of the



Cover design from house-organ of the J. W. Clement Company, Buffalo, the original of which in red-brown and black on India tint stock is especially impressive. The stock is roughed in an unusually attractive pattern.

FUTURA

BAUERSCHÉ GIESSEREI

FRANKFURT-M. BARCELONA NEWYORK

Cover design of booklet of the Bauer foundry, Frankfurt, Germany, by which its new sans serif type, Futura, is introduced. Although of the simplest geometrical form the face has a degree of grace uncommon in the usually mechanical gothic style.

specimens are done in bold faces, particularly objectionable, among which are the heavy condensed gothic and the extended Cheltenham Bold. Layout is better, as a rule, also, than the handling of the type. In the letterhead for the Holden Lumber Company, which is light in tone, Cheltenham Old Style is used for the main line, the second display is in Copperplate, and the address Old English. The three styles in smaller sizes are mixed in the other lines. No two of these faces harmonize and no such combination can result in good work. If the entire form had been set in the Cheltenham, even in the Copperplate, it would be much better. Make it a rule to confine each form to one series. To set the head and text of a leaflet, like the "Thank You" stuffer, in Copperplate and the signature in such a refined and beautiful face as Cloister is decidedly bad. The two styles have nothing in common. Compare one of the items mentioned with the title page of the Bagby menu and you'll see at once that the one series to the job idea is sound. The Barker letterhead in the open-face type is quite attractive, but the line in color is weak. If it were in Caslon Old Style the line would have sufficient body to harmonize in tone with the lighter style. Lines that are to be printed in the second color, and all colors are weaker than black, should be set in type relatively enough stronger to compensate for the weakness of the second color. In the Harris heading you have degraded the handsome open-face by associating it with the common Copperplate; a dress affair with one guest in overalls. That the latter does very well by itself and in its proper place is shown by the letterhead of the Chevrolet Sales Corporation, which would be improved if the ears at the bottom were pulled in somewhat, making the contour of the form less awkward. The effect is too square-cornered and box-like.

MANCHESTER MUNICIPALITY COLLEGE OF TECHNOLOGY, Manchester, England.—*Concilio et Labore* is a remarkably attractive and interesting booklet; the decorations are distinctive and the pleasing colors are decidedly unusual. The cover is thoroughly original and halftone illustrations, tipped on each left-hand page, picturing different operations in printing, are excellent. Composition of text is good in the main and distinguished by a pleasing and legible old style. There is often too much space between words; extra space between sentences, furthermore, serves no good purpose in reading and spots the page. The present practice is to allow only a shade more open space between sentences than is placed between words. The lines of the heads are spaced too closely; seemingly no allowance was made for the fact that caps. are all uniform height and have no shoulder at the top as there is on most lower-case characters, and which automatically provides some space between lines.

GENTLEMEN



.... for the best month in our history. Most months find us busy, but March 1928 broke all records. During this period our output exceeded by 31% the largest of any single month in the 19 years of our existence. You, our friends and clients, are responsible. And so, because we unreservedly like our work, we say again
.... Gentlemen, we thank you!

ON STREET • NEW YORK CITY • PRINTING

A touch of the modernistic; half of spread from folder by Edgar C. Ruwe Company, New York.

JOSEPH BRADFORD, Portland, Maine.—All the specimens are excellent; you have good types and use them expertly. The margin at the bottom of the title page of the otherwise attractive "Fishing" folder is decidedly too narrow.

STAR
BARBER
SHOP

28 WEST GABILAN
SALINAS, CALIFORNIA
C. J. WILABE, Prop.

An unusual layout in which the units are uncommonly placed, yet well balanced out of center, distinguishes this business card by the El Camino Press, Salinas, California.

EL CAMINO PRESS, Salinas, California.—All your specimens are excellent, and some are quite unusual. Among these is your letterhead in three colors, which we regret we can not satisfactorily reproduce. The business card for the Star Barber Shop, shown on this page, is original and "catchy," and, we think, effective.

Trust Brothers Printing Company

1341 FIFTH AVENUE
ATLANTIC
8897

BETTER PRINTING
FOR EXACTING
PEOPLE

PITTSBURGH

Effective and unusual use of ornament and initial makes this interesting letterhead by John T. Clark, Pittsburgh, something really new and outstanding.

AD
TORQVATVM

Q HORATI FLACCI
CARM. IV. 7



RENDERED
INTO ENGLISH BY
G. CLINTON JR.

Harmonious ornament effectively used on title page by Emil G. Sahlin, Eden, New York.

EMIL GEORGE SAHLIN, Eden, New York.—While most of the specimens in your latest package are excellent and some of them are charmingly quaint, others suggest that you place too much dependence upon type and paper. While type is the foundation of good typography and paper is sure enough "part of the picture," these things can not carry the full burden of modern print. Some of your work, notably the Ridge Club's dance invitations for March 3 and 10, is crowded. Type requires an occasional breathing space which is not apparent in these items, the lines of which are too closely spaced. The card of the Civillite Six would be decorative enough and much more pleasing without the ornaments at the end of the line "The" and if some pleasing initial had been used instead of an awkwardly shaped letter, or none at all. The letterhead for the Civillite Six, in which the same type and illustration are used, is characterful and impressive. The cover, "The Book of Friends," is handsome, the colors being quite pleasing. It would be better, however, if there were more space between the lines of the title. We are reproducing one of the unusually interesting and attractive title pages; it represents your best work.

JOHN T. CLARK, Pittsburgh.—We are reproducing your letterhead for Trust Brothers, which is refreshingly original. The accompanying items are all they need be, if not quite so outstanding.

ALGOT RINGSTROM, Buffalo.—While undue prominence is given the slogan in your cover for THE INLAND PRINTER, the general effect is not unpleasing. The border is particularly good. If the slogan were set in smaller size, the main group lowered somewhat, the ornament between "volume" and "number" eliminated and that line centered, avoiding the gap of space between the two units, a decided improvement would result. Spacing is, of course, quite bad between the lines of the slogan, an unavoidable condition when type is set in narrow measures, relatively, of course, to the size of the type.

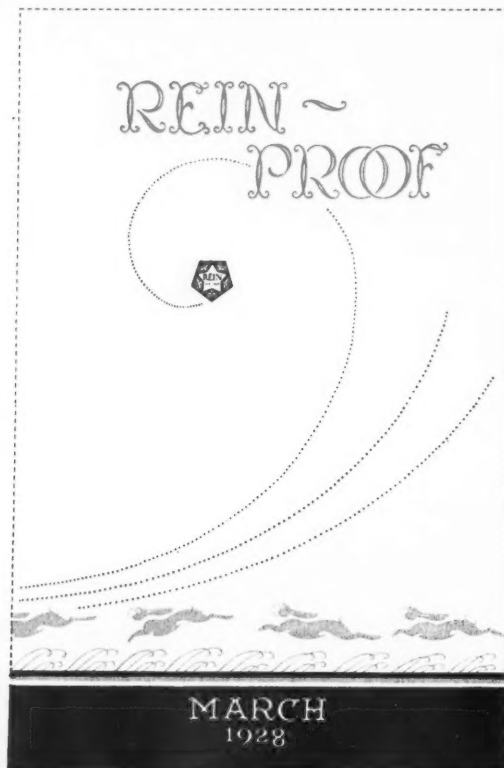
V. M. RUSSELL, Platteville, Wisconsin.—The letterhead for the State Teachers College is quite satisfactory in the main. The inconsistencies in form of the two type faces are not pronounced because the Copperplate is so much smaller than the Kennerley. If the larger group of names were on the left-hand side and the smaller on the right, balance would seem better. Incidentally, the names are spaced rather too closely; one-point leads should be added between lines.

FEDERAL PRINTING COMPANY, Des Moines.—As usual the specimens you submit are fine. They are exceptionally strong in display, rule and ornament being used with telling effect, also with restraint. Your type faces include the best present-day fonts and are exceptionally

printing of the numerous portrait halftones on the dull-finished stock used is an achievement in itself of which you may feel proud.

ADAM DE PHILLIPS, Berkeley, California.—Your new card is one of the most original and effective we have seen and is reproduced be-

and display are good. "The Busy Bailer" blotter is likewise quite satisfactory, although the combination of red and yellow in the border is not a pleasing one. Again, the text type is too large and bold in relation to the heading, but the most pronounced fault is the fact that the mar-



Cover of house-organ of the Rein Company, Houston, Texas. The original in red (for the name lines), light yellow-brown and black on India tint stock is far and away more attractive than our reproduction makes it appear.



Type, a stock ornament and common periods employed with telling effect by Walter Wallick, Federal Printing Company, of Des Moines, Iowa. The original is printed in black and red on India tint antique paper.

well composed, spacing being especially good. We would like the folder for the Western Newspaper Union, entitled "Fable Number 9, The Two Printing Buyers," much better, however, if the yellow were slightly richer. The lemon hue is weak in tone and is unpleasing to many people. It also has something of a glare, and is disturbing. The booklet, "Magic Coin," also for the Western Newspaper Union, is unusually effective. We are reproducing the cover, especially because it illustrates a layout idea which may be adapted in various ways by other readers.

JOHN M. STONE, Marshfield, Oregon.—Your opening program for the Oriental Theater is one of the snappiest things of the kind we have seen. The cover by Apprentice Ted Green is very striking; the drawing is at least next door to professional. We can not conceive of anything more appropriate or effective than the idea of featuring the sacred elephant. The colors, orange, green, gold, and black on a shining red stock are likewise very appropriate. Another fine feature is the running head, which carries out the idea of the whole book quite admirably and has considerable decorative merit besides. In connection with a large initial it gives the pages an effect of snap that is altogether unusual. Uncommon type faces are used to a large extent in the display, and help materially in carrying out the oriental idea, which a conventional design in more commonly seen type faces would hardly do. The use of Bookman for the text is likewise a very good feature. Finally, the

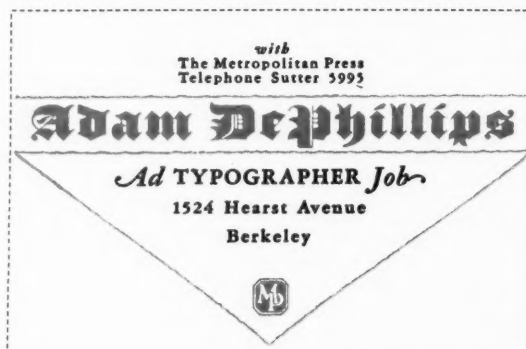
cause it will suggest ideas to many other readers. The announcement of the arrival of Ralph Ivan is likewise original and effective. Colors are pleasing and effectively used on both items.

CARTHAGE PRINTING COMPANY, Carthage, Missouri.—Although we have a personal aversion to a design in which blue, green, and yellow predominate, we like the blotter, "Printing Is the Inseparable Companion of Achievement." Except for the fact that there is too much space between words in the text and around the initial, particularly at the bottom, layout

gin along the right-hand side of the poem is too wide in relation to that at the left. While the longest line is centered, the fact that many of the lines are rather short means extra space at the right of them. The only thing to have done was set the poem in smaller type so the white space at left and right could be balanced, which means the longest line would be closer to the border on the right than the one on the left. Rather than do it this way, sometimes it is desirable to carry part of the longer lines in a poem over to a second line, making a hanging indention. Decorative details on the "Men Are Four" card are too pronounced in relation to the type; we suggest that the decorations be smaller, printed in a lighter color, or, better still, that a larger size of type be used for the text group.

J. RUDMIN, Union, New Jersey.—We'll say your cover for THE INLAND PRINTER is modernistic. It has merit, in a general way—if one inclines to like the style. We can not see how setting the slogan on a slant helps; in fact, we are quite sure that if the red line extending diagonally from the upper right-hand corner carried the eye to the slogan placed in the lower left-hand corner the effect would be much better. In that event, the date, volume, and number should be placed directly below the name, which is across the top.

DONALD T. DILLER, Pittsburg.—Your page entitled "Woman" is handsome, although the addition of one-point leads between all the lines would improve it considerably.



Something unique in the way of a "business" card, the original of which is in blue, light orange tint and black. It is the work of Adam De Phillips, of The Metropolitan Press, San Francisco, one of many coast stars in the typographical firmament.

TYPOGRAPHY

Subjects treated under this heading are selected and prepared to provide specific, sound and practical instruction in layout and display composition.

Ascenders and Descenders

By N. J. WERNER

NOTHING is more foreign to my intentions than to get into a controversy with those who believe the readability of a page depends largely upon the space between the lines of type, or, more particularly, the space between the "small" letters of one line and those of the next. By "small" letters, of course, I mean such lower-case forms as m, a, c, e, o, etc., having neither ascending nor descending appendages. If I disagree with them, which is doubtful, it is with respect to the quality of this space, and how free it shall be of obtrusive hindrances to the eye of the reader — specifically, whether the white space shall be obtained through the use of leads or by the casting of larger shoulders on the type, which, by the way, is an uneconomic procedure.

As a type designer I am more observant of details about type faces than printers, as a rule, and in noting what other designers have done and are doing, many peculiarities in the realm of type design have come to puzzle me and cause me to wonder why this and that and the other were done. One very clear conclusion is that few type designers or cutters work by definite rule. This is evident from so much haphazard work.

Bodoni's Proportions Questioned

Bodoni's rule for sizing faces, that is, "to divide the body measure of the type into seven parts, two of which are to be for ascenders, two for descenders, and three for the small letters," is the only such rule I have seen. In my opinion, it is a very poor one. It was so very easy to formulate, requiring no study whatsoever, "two to three," and there you are! Besides, the "mystic number" seven is brought into play and that should settle it for many who place faith in anything but common sense. Mechanically, the rule made things easy for the punch cutter; it simplified the fixing of his measures.

EDITOR'S NOTE

THOUGH, like the editor, you are a champion of long descenders, you have doubtless more than once had to fall back on some "big face" when your original Caslon, Cloister, or Cheltenham in six or eight point seemed to put too much of a strain on the eyes. You've wished for a style of type in which the beautiful proportions of faces that have long ascenders and descenders would be maintained in twelve-point size and larger, and their weakening influence on the smaller sizes done away with. There are a dozen different angles to the question of ascenders and descenders, and Mr. Werner, a veteran type designer, makes about as strong a case against them in this interesting article as we believe can be made. He particularly stresses problems of spacing and alignment that the every-day compositor bumps into right along and in doing so brings out constructive ideas. While the prevailing preference for faces having long ascenders and descenders has compelled Mr. Werner to go years back for most of his examples, there are two sides to the question, even today. And, in fairness to him, it is not because these examples have short descenders that they are ugly.

Proper proportions, however, are not so easily determined. Esthetics has no special predilection for simple numbers. Nor has nature, either, else we might have simpler figures to indicate the proportion of the circumference of a circle to its diameter than those which are symbolized by the Greek letter "pi." No, the ascender and descender problem is not so easily figured out. Besides, it does not appear that others followed Bodoni's rule.

The Bruce Type Foundry had a fine roman face regarding which I long ago made the discovery that the size of the caps. was measured by the size of the third next smaller type body; thus, for pica the caps. measured bourgeois in height; for small pica, brevier; for long primer, minion; and so on. (This was before the American point system, when Bruce still used its geometrically graded series of type bodies.) But this rule was never published and was perhaps limited to the one face.

There was also the alignment scheme of the late W. W. Jackson, who produced the first series of lining gothics. In this the face sizes were fixed to meet his theory of face alignment. Death prevented the continuation of Jackson's studies and the details of this plan were never put into print. His method had one fatal fault, which it would require too long to describe.

The Standard Lining System

Next is the "standard line" system. I devised this in 1889 and the Inland Type Foundry put it into practice in 1893. This fixed the sizes of the caps, but did not interfere with the sizes of the small letters or the ascenders. The descenders on a few sizes, however, had to be shortened a trifle. The standardized lining system has been accused of necessitating the shortening of the descenders on *all* sizes, but the accusation is not based on facts. In devising the system existing faces were taken into consideration in order to require as few changes as possible when adapting to the system older faces copied by the Inland foundry.

Some have criticized this foundry because it avoided the showing of descenders in specimens, claiming this was done to "conceal their being shortened." The fact, however, is that the compositor (myself) had no such idea in mind and had no such instructions from the manager. I held the notion

that descenders threw the general view of a line out of balance, hence used them sparingly.

Apropos, Mr. Updike remarks about the typefounders' former use of Latin sentences in setting type specimens, because this language employs fewer descenders (and "y" not at all), and the display lines set in it were thought to look more pleasing than if they had been set in English.

As I have said before, haphazardness is and has been much in evidence in type designing. A peculiar manifestation presents itself when we compare faces of different widths. In condensed, and especially extra condensed faces, one finds that the small letters are usually much taller than they are in the average medium-width faces, the extension in ascending and descending letters being abbreviated in proportion.

**Fine Fruit and Berry
Defeated the Persian
Excellent Feature
Members are Present
Selling Prop
Orange Pickers**

FIG. 1.—Condensed faces in which, with the exception of the last line, the small letters are all above normal in height.

Then we find that in many extended faces the small letters are smaller than those in medium-width faces. While they have an extended appearance they are practically but little wider than large medium-width faces, and thus work against the compositor's intention when he wants wide letters to make a few of them fill a line.

Economy Plays Its Part

To show what has been done with condensed faces, I present in Fig. 1 specimen words from a number of fonts. They speak for themselves and leave us to wonder why they are as they are. None of the designers or engravers has given us the answer. I shall, however, give the answer in one instance. The Boston Type Foundry had a pleasing cap. face which was

named Facade Condensed. Its popularity encouraged the addition of lower-case to the fonts and the late Gustav Schroeder was given the order to cut it. He was told that the foundry would use the letters c, o, s, v, w, x, z from the 42-point as lower case for the 48-point, so he was to cut the other nineteen lower-case to match. Thus, the foundry saved on the cutting of seven

Lower half not easily Additional Feature Program Enrich Produce Annual Nienlav the Croastet

FIG. 2.—Showing lines of type cut through the center of the small letters. Those in which the small letters are large are more easily read.

letters in the one size only. The proportionate size of the small letters throughout this series was thereby determined. It resulted in a very large lower-case.

While condensed faces generally had the lower-case forms excessively large, many medium-size faces show a tendency the other way, which spoils some, otherwise fine modern faces.

The Cheltenham Idea

When Cheltenham Old Style was first offered an elaborate circular was issued to explain why the lower-case was made so small in relation to the caps. It was argued that in reading the eye ran over the top half of the small letters and that long ascenders were an assistance to the eye. Lines of the face were presented cut in half in the endeavor to prove this contention (Fig. 2—first line). The argument failed to convince me because I thought that if the small letters were larger a bisecting of them would show more of their contour and that sufficient length of the ascenders would be left to give the eye the necessary help. This is proved by the lower four lines of Fig. 2.

I once almost ruined my eyes reading proofs of matter set in 10-point Cheltenham Old Style. Had it been in 8-point or 6-point I surely would have lost the use of my eyes. To cast small letters of an 8-point size on a 10-point body, with long ascenders, is almost a crime. It was, therefore, a wise thing when the foundry brought out a larger lower-case for the same caps., that is, the Cheltenham Wide. Nevertheless, I have noted that on receiving proofs of matter set solid in Cheltenham Wide a certain advertiser made a notation thereon to take out the leads. Though this big advertiser uses white space lavishly elsewhere, he felt there was too much space between the lines.

A Startling Suggestion

Regarding the argument that the eye travels along a line and takes in only the upper half of small letters, implying that descending letters are out of the range of vision, why have them at all? What a boon it would be not to have letters with descending parts! In the first place, see how much type metal, now necessary because of the five descenders, g, j, p, q, and y, could be saved. Then, there's the cap. Q, which, by the way, is sometimes designed so that its tail does not descend below the line. And of these the cap. and lower-case g are exotics; the spelling simplifiers will tell you how unnecessary they are.

Descender Letters Little Used

Some one counted the number of uses made of each key on the linotype keyboard. Of a total of 1,405 uses, the noted use of the descenders was: g, 20; j, 10; p, 20; q, 5; y, 24, and Q, 1, totaling 81, or 5½ per cent. The use of cap. and lower-case g represents less than ½ of 1 per cent. Isn't it remarkable, therefore, that the faddists are minded to lay extreme stress on the descenders, which count for so little in actual use?

Two type faces have appeared minus descenders, the g, j, p, q, and y being designed so that they do not drop below the line. These are Hobo (badly named) and Advertisers' Gothic. The effect is not bad. Although these faces are bold and not usable for all-around purposes, they indicate possibilities.

If we had no descenders the face alignment problem would have been

**Kelmscott Press
Bibliophile
May be acquired
Klingspor-Schriften**

FIG. 3.—Some faces in which the dwarfing of the small letters goes to the extreme, taken from American, French, English, and German sources.

solved decades ago. Of course, everything would then have to be leaded, to secure proper space between the lines, but would you find any one (especially compositors) objecting to that? There would be instances when advertisers wanted matter very compact, where the leads would be left out, thus achieving what is now impossible with type.

However, since it is seemingly impossible to be rid of descenders, any dreams about the resulting advantages are quite futile.

A small number of type faces show awful vagaries in the lengths of ascenders and descenders, also a *reductio absurdum* in the sizes of small letters (Fig. 3).

There seems to be a craving with those who want to make of letters ornamental things rather than conveyors of information, to do all sorts of contortions with them, to apply quirks of curves and curlicues, and to add appendages of all sorts.

Jazz in Type Design

It is beyond me to understand a designer who is so enamored of long ascenders that he has them extend far above the caps., as they are in a "private" type face produced a few years ago. This face was recently outdone by another, in which special ascenders and descenders of double length are supplied with the fonts, being cut on larger bodies, which the compositor has to justify into line. I suppose we can not avoid such "expressionism." Typography seems fated to have its jazzers just like music. Many "fall for" in printing, just as many are affected with it in musical "expressionism." One consolation, however, is that the oddities die out quickly, like the fool things in dress fashions — though they may return at times.

In faces which have abnormally long ascenders the caps. are generally too large as compared with the small letters. They obtrude upon the reader's eyes and hinder easy reading. They also tend to be too heavy in stem weight, which adds to their obtrusiveness. In matter in which there is an

lead matter set in a 10-point face having normal length ascenders and descenders is far easier to read than a solid page of 12-point set in a face having ascenders and descenders of exaggerated length.

How much leading is to be used for the best effect and the greatest benefit to the reader's eyes I shall not attempt to say. It may, however, range from 1-point leads for 5, 6, and 7 point faces, up to 3 and 4 point leads for 14-point.

Where the Shoulder's in the Way

Those who set advertisements and are in touch with the many advertisers who want big type, and especially big



FIG. 4.—Showing extravagant use of space below a descender which is too long.

figures for prices, can tell many a sorry tale of not being able to use certain faces in limited space. They have too much of a shoulder. A small line is often wanted close to a big line, but what can be done when the shoulder on the big type is from 14 to 20 points? The folks who are so fond of long descenders lose sight of the practical side of typography.

In addition to the space taken up by long descenders, there is space wasted between descenders and the lower edge of the body on some faces, adding insult to injury, so to speak. I give an example, in a 48-point Bodoni lower-case p, which I place between rules showing the limits of the body (Fig. 4).

Some advertisers want type underscored with rules. If the face has long

however, this maltreatment of foundry type is forbidden. It is costly, too.

Here a few words about figures seem in place. In furnishing a layout, the department store ad-writer orders the use of 60-point Powell figures for prices and then finds cause to swear because the proof comes to him with figures that look to him no larger than 48-point size. True, the compositor followed instructions, but the ad-writer was probably not aware of the smallness of the figures in the Powell face. I am only mentioning the Powell as an example; there are other "artistic" faces in which the figures are too small for practical everyday use. John Henry Nash imported a type face from Italy for his privately printed "History of Dante." In this face the figures are much smaller than the small letters. Why? Mayhap the notion that they were "nifty" governed their designer.

Cap. Size Figures Best

Figures should be the same height as the caps. In cases where a line of caps. contains a date or a sum and the figures are smaller than the caps., the line looks like — well, let the office devil tell — he can swear.

Theodore L. De Vinne once advocated two sizes of figures for roman fonts — one series to be the size of the caps. and the other to be the size of the small caps., because when figures had to be used in small cap. lines the usual ones looked too obtrusive and spoiled the appearance of the line. Although small caps. are almost out of vogue, the suggestion of Mr. De Vinne emphasizes the fact that figures should not be subject to faddists' views, but must maintain a proper proportion in size. This can not be anything else than the exact height of the caps.

brass we offer as justified in every typographic specimen. When all have the entire fancy printing outfit, their sizes of all leaders will Line accurately All single letter- itself cast to line by any other shown classes the caps of any one body are on same Line will line other as small caps, also leaders a any a bill bodies, be but be body be body can cast could can date- dotted, ever few events far face had heads hence have it in line leads lengthy lines lead means may of of on of of on or of of of point Rome. rest roads slugs. so than this the this that thus that time that them upon will what would what would will

FIG. 5.—Showing variances in the sizes of lower-case letters of a number of faces.

abundance of caps., the "leading" intended by the use of long ascenders and descenders is almost completely lost. The caps. use the theoretic white space.

A Plea for the Use of Leads

The best way to get white space between lines is to use leads or cast the matter on a larger body than that belonging to the face. A page of 2-point

descenders the rules can not be placed closely enough under the type lines to be satisfactory. In fact, the rule comes closer to the line following than it does to the line it is desired to underscore. The compositor sometimes resorts to the mitring machine or to the saw-trimmer and trims off the shoulders of a line of type so he may underscore or set matter close to it. In most offices,

Faddists who laud the long ascenders and descenders fail to take note of the thousand and one varying uses of type. Anent this, I was struck by a remark in Mr. Updike's notable book on type faces, where he says the matter in Bodoni's books was less readable than that which Didot printed. Ahem, and who will more than just look at William Morris' hand-press printed books?

But to resume my main topic. When first presenting the standard lining system to the printers, I set up paragraphs showing various faces in side-heads to portray the exact alignment. Here the lack of uniformity in the sizes of the small letters of different faces showed itself very plainly and furnished a good argument for the contention that not only should the caps. all be cut according to a standard of systematic heights, but that the small letters should follow a similar rule. Fig. 5 illustrates the great variations in the size of small letters.

Heavier types are often used in the midst of matter to give special emphasis where italics are not exactly suitable, but in size these should be neither larger nor smaller than the type of the text. Constraining a design to a rule of size in nowise spoils the feature of a face, and it gives greater utility.

Lower-Case Two-Thirds Cap. Size

In designing type for the Central and Inland foundries I gave much study to proportion. I came to the conclusion that small letters which measured less than two-thirds of the height of the caps. were too small to look well, and that small letters which exceeded three-fourths of the cap. height were equally objectionable. I split the difference between two-thirds and three-fourths, which gave seventeen twenty-fourths as the desirable proportion. I drew the caps. to a scale of 72 nonpareils and the small letters to a scale of 51 nonpareils (with the proper exaggeration in the size of O and other "round" letters, to overcome optical illusion). In this proportion of seventeen to twenty-four I found one that seemed most pleasing to the eye, and I

Latest Offering Exact Cutting Neatest Face Saving Compositor Specimen

FIG. 6.—Some of the faces in which the small letters bear a definite proportion to the height of the caps., being as 51 to 72 (the recommended proportion).

applied it to a number of faces without objection from any users of the faces.

This rule gave seven twenty-fourths of the cap. height for the length of the ascending parts and six twenty-fourths for the length of the descending parts.

In Fig. 6 some specimens of faces cut according to this rule of proportion are shown. They give ample evidence of the superiority of this rule over any other, especially the one accredited to Bodoni.

It was only when I became interested in the standardization of paper sizes and learned the economic advantages and the esthetic value of the so-called "hypotenuse oblong" that I found I had discovered this element of beauty long ago, and I had through reasoning applied it to type faces. If you have followed the discussion about this particular oblong shape, you will remember that the hypotenuse proportion is as 1

to the square root of 2 or 1 to 1.414. Now, 17 to 24 (or 51 to 72) is practically this proportion applied in the realm of type design as it is in the paper size standardization, thus combining the esthetic with the practical. This basic principle is now adopted in Germany in the new standard of paper sizes, and is being favorably considered in Switzerland, Austria, Sweden, and Belgium for the same purpose.

I am now asking that it be employed universally in type designing, so that we may in time get faces that conform to esthetic fundamentals as well as to the easiest practice.

An Up-to-Date Printer

By FREMONT KUTNEWSKY

ONLY look at this," said the president of the advertising agency. "Look at that black! He's the only printer in this town that puts ink on paper like that."

"Must be high priced," I said.

"You say you want a high-grade booklet?"

"Yes—I suppose I'll have to pay the price."

I found the printer in a good-looking building. He had a well equipped shop employing thirty or forty people.

"I have a booklet," I told him; "it's got to be a perfect piece of printing—something we can be proud of. An advertising agent referred me to you."

"That's the kind of work we try to turn out," said the printer, smiling. "Who was the advertising agent?"

I told him.

"Oh, yes, we recently did a job for one of his clients. Come into the other room and we'll see what the job is."

While he was putting down the totals of his estimated costs the shop foreman came in to ask a question.

"Here, Bill, figure the composition on this booklet," he said to the foreman. "I figure it at about thirty-five dollars."

The foreman looked quickly through the dummy and smiled.

"A half hour to the page? Why, there isn't a man in the world—"

"Wait a minute—just the composition, that's all."

"Well, I can tell you it isn't enough."

"Here, sit down and figure it—just the composition."

After the foreman had gone the printer made me a price of four hundred dollars for the job, which seemed right. So I placed the order and started to leave.

"Before you go," said the printer, "have you time to go over the entire

job with my foreman? We want to know exactly what you want."

The three of us went upstairs to a still more private office and discussed, page by page, every detail of production—type sizes and measures, margins, initials, colors, and decorations.

The foreman then left us and the printer began showing me samples of his work.

"Tell me," I asked him, "how in the world do you get this peculiarly pleasing black? It seems alive. Even in solid chunks it looks soft and satiny."

"In the first place," he said, "I buy high quality inks, and in the next place I don't allow them to be mixed or tinkered with. I figure the manufacturer knows a lot more about mixing inks than a pressman. I have expensive machines to be sure of proper ink distribution, and the rollers are kept clean. That's all there is to it."

"Sounds simple enough," I said.

"Any printer can do it," he replied.

"I wonder why most of them don't," I said.

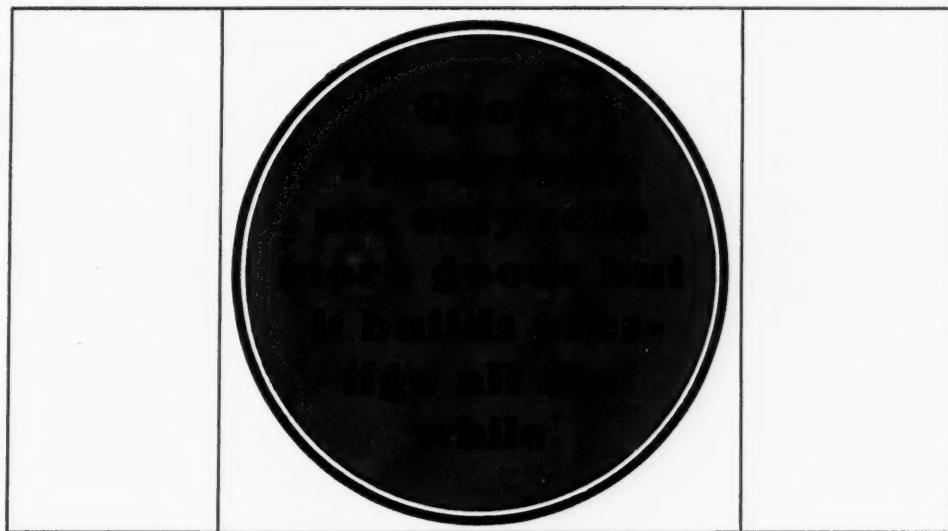
"They are afraid of the ink smudging, for one thing."

"How do you prevent that?"

"Come out in the shop and I'll show you."

We went to a machine that was delivering a large sheet on an extension delivery. The sheets were falling into a box that was just their size. They settled very slowly because of the balloon effect of the air beneath them, which had to escape by way of the narrow margin between their edges and the sides of the box. They came together gently and evenly, without smudging.

As I was leaving I heard a man introduce himself as from a distant city, and asking if he might see the shop. He said he had heard about it.



AN EXHIBITION OF ADVERTISING ON TYPE AND TYPE USE

BY THE

Warwick Typographers

ST. LOUIS, MISSOURI

ON an idea can be founded a business; but there's an "if." The idea must be big, and you must put it over in a big way. The Warwick Typographers, St. Louis, have slain the "if" and built a business.

The creation of good typography is no slight task. But when that is done, the good typography must be sold. By salesmen? No, said the Warwick Typographers. Salesmen often ruined sales. And they were expensive.

By good typography? Naturally, said the Warwick Typographers. If our good typography can not advertise itself, something is wrong. Printed salesmanship must sell for us, make good its own claims.

And printed salesmanship is doing the work. At the start, cards were mailed every other day. Attractive they were—nicely set up, and sparkling in well-matched colors of stock and ink. Each was to welcome the

prospect gaily as he sat down at his desk. Each carried one brief thought pungently worded and well worth the reading.

Now the Warwick Typographers mail one or two cards a week. These are twice as large as in the original lot. Color is used freely, but with propriety. The typography is always distinctive and interesting.

New type faces are announced and also shown. Acquisition of a versatile kind of proof press is featured by running the cards on this press in two colors—and producing all the quality of a printed job!

Results? Customers and prospects save the cards. They place orders "to be set like your last card." At negligible cost, the Warwick Typographers are handling a steady run of business. If things get a bit dull, they know the natural solution. A card goes out, and the orders begin to come in.

**We like to work
for clients who
value our good
Judgment to the
same extent as
we value theirs**

**WARWICK
TYPOGRAPHERS**

617 North Eighth St.
St. Louis, Mo.



Printed in Persian-Orange and
Emerald-Green on White Stock.

Printed in Light Blue and Deep
Purple on White Stock.

**Advertising that does
not reflect the good
character of an estab-
lishment, or that does
not typify the merit
of a product... does
that business or that
product an injustice.**

WARWICK TYPOGRAPHERS
617 N. EIGHTH ST. ~ CENTRAL 9210-11


Other things being equal ~
**The Ad that Attracts
the most readers is
the one that Attracts
the most business.**

Printed in Indian-Red and
Black on White Stock.

Printed in Brilliant Red and
Black on White Stock.

Warwick Typographers
Advertising Composition
Olive 9221 - 9222

*The type equipment of
Warwick Typographers
is now one of the most com-
plete and comprehensive
in the country - rivalling,
in variety, the largest
typographic shops in
New York and Chicago.*

 HE effective
or striking
ad, as distin-
guished from the
ordinary one, does
not "just happen."
It is the result of
thoughtful plan-
ning, both editorial
and mechanical.

Warwick Typographers, Inc.

617 Third Street N. - St. Paul, Minn.



Printed in Deep Yellow and
Black on White Stock.

Printed in Deep Yellow and
Brown-Black on White Stock.

**Whenever you hear the
expression:—"in Cold
Type"...you can wager
they are not discussing**

WARWICK

Typographers - 8th & Lucas, St. Louis, Mo.

ABCDEFGHIJKLMNOPQRSTUVWXYZ

1234567890\$Qu+ff

1234567890ofne d The e

GOUDY BLACK

The very latest addition to the Warwick Library—and naturally the first in St. Louis—is this Goudy Black face. A Monotype face patterned along the lines of Cooper Black. This new face is more condensed than Cooper Black, thereby allowing more copy to be set in the same space.

abcdefghijklmnopqrstuvwxyz

Printed in Brown and Black
on White Stock.

Printed in Black on
Delph-Blue Stock.

THE MESSAGE
conveyed is the im-
portant thing, any-
thing that tends to
weaken it should be
decried. Inversely,
any means of adding
attractiveness, and
thereby increasing
effectiveness, is
most desirable. And
that is our business.

WARWICK TYPOGRAPHERS
720 OLIVE STREET - GARFIELD 9221

"Typography Headquarters"

**A Series of
DISTINCTIVE
Mailing Cards
will pay out of
all proportion
★ to their cost ★**

Striking-Effective-Economical!

*One thought at a time . . . but that
thought "put over" forcibly! Each
card different ~ Each card Orig-
inal ~ Each message Short! Blaring
color combinations . . . or harmony
combinations . . . in two or more
colors ~ You prepare the copy ~ We'll
prepare the effect ~ in distinctive
type faces that you cannot duplicate.*

WARWICK TYPOGRAPHERS

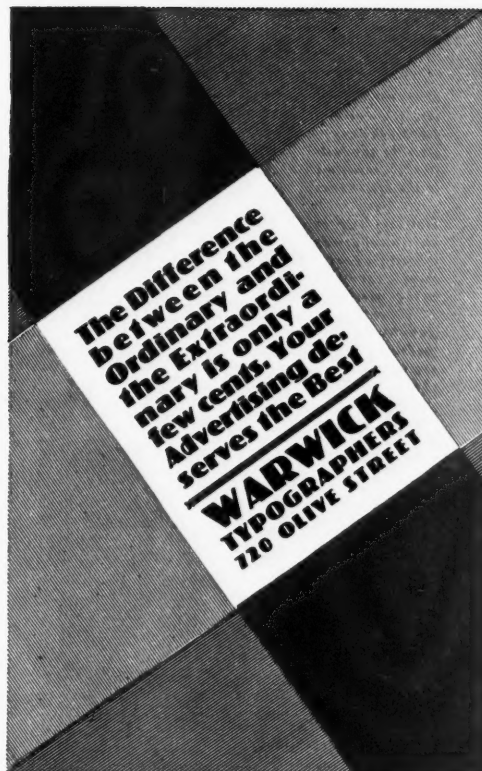
Printed in Tan-Brown and
Black on White Stock.

Printed in Olive-Green and
Black on White Stock.



THE mere fact that the
Largest Advertisers
use professional ty-
pography exclusively
should be conclusive
evidence to the small
advertiser that what's
good for the goose is
good for the gander.

WARWICK TYPOGRAPHERS INC.



Printed in Red, Yellow, and
Black on White Stock.



WARWICK TYPOGRAPHERS

617 NORTH EIGHTH ST.

Printed in Brown and
Black on White Stock.

**Anyone who can write, can write an
ad...just as anyone who can set type
can do "Typography".... And How!**

The difference in Results is "Experience"

Most drawings and layouts are usually far enough along to "start the composition"... sometime in the afternoon.

Most copy is OK'ed and is usually ready to start the composition... sometime in the afternoon.

And almost all cuts are delivered late... sometime during the afternoon.

So...

Don't waste precious day-time time waiting for proofs on composition when it can be done "overnight"—and at no increased cost... by Warwick.

Printed in Olive-Green and Black on White Stock.

Printed in Dark Blue and Black on White Stock.

Get a running start on tomorrows' ads by having them set Tonight at Warwick

Proofs will be ready for your approval the first thing in the morning. ~ ~ Simply 'phone Central 9210 before 5 P.M. today

★ Never put off till tomorrow what should be done ~~today~~. Tonight.
... particularly your composition.

Don't waste precious daytime time waiting for proofs on composition when it can be done "overnight"—at no increased cost—by Warwick.

Printed in Orange and Black on White Stock.

Printed in Bright Green and
Black on White Stock.

Can you work better at Night



Most Advertising Men
claim they can ♦ ♦ ♦ No
noise—No interrup-
tions—No phone calls
—100% pure concen-
tration on the work
in hand ♦ ♦ ♦ Same
with Warwick Night
Service. And it doesn't
cost you one cent more

Salesmen's Portfolios

Warwick has a new proof press.
Not just an ordinary proof press
but the only one of its kind now
in St. Louis. A press that is ideally
suited to pull perfect proofs for
Salesmen's Portfolios. A small
cylinder press, that is hand op-
erated. Pulls perfect proofs... one

or two colors, in register... quick-
ly... economically—without all
the attendant fuss of locking up
and making ready, etc., etc.,...
without all the work that is neces-
sary where the ordinary press is
used. Quantities,... up to 200.
Size, up to a full newspaper page.

WARWICK TYPOGRAPHERS / INCORPORATED
710 OLIVE STREET

Printed in Bottle-Green and
Black on Laid White Stock.

Printed in Light Blue and
Black on White Stock.



Advertising, like steel, must
be magnetized before it has
attractive power...and the
magnetizing power of ad-
vertising is Fine Typography
☞ ☞ Warwick Typography.

WHO EDITS YOUR COPY LAST ?

Your advertisement has been most thoughtfully planned, alluringly worded and illustrated, and it will be in proof form the next time you see it... but who edits it last?

You can correct the proof, of course, but can you alter the style of the type, the general arrangement and layout? Can you unscramble the eggs? Not without a worse job than you had to start with. Can you?

Good wine may need no bush, but good copy needs good typography —for the compositor is in reality its last editor.

Warwick Typographers
Advertising Composition
720 Olive St. - St. Louis, Mo.

"TYPOGRAPHY HEADQUARTERS"

Printed in Orange, Buff, and
Black on White Stock.

Printed in Persian Orange and
Black on White Stock.



TYPE DOESN'T MAKE A
TYPOGRAPHER ANY MORE
THAN PAINT MAKES AN
ARTIST, , TYPOGRAPHY
IS ART WITH TYPE



"WARWICK"
Typography Headquarters
ST. LOUIS

**Unusual Effects
are best secured
with type faces
that are novel
and distinctive
in appearance**

WARWICK TYPOGRAPHERS • INCORPORATED

Printed in Light Olive-Green and Black on Buff Corrugated Stock.

Printing Throughout the World

Chapter XIV.—By ROY T. PORTE

WHO invented the printing art? How to answer the question depends a great deal upon where you are. The correct answer in Java is Coster. In about every other place Gutenberg is the right name to give, unless you are in China, when you must say the Chinese, or in Korea (Chosen), where you admit that the Koreans cast type before Gutenberg ever thought of it. It is all a matter of geography, you see, and it is well to know these things in order to keep everybody in good humor.

Coster is supposed to have worked out the idea of casting individual type from a lead and tin alloy, and also to have adapted the cheese or wine press so that it would make impressions on paper or parchment from forms of type previously inked with pads made from sheepskin.

Java Owned by Holland

Java belongs to the Netherlands, the country known in America as Holland, and the people of the Netherlands call themselves "Dutch"; therefore, in Batavia or any part of the East Indies to be a "Dutchman" is a good deal like being a descendant of a *Mayflower* pioneer in New England.

After our visit in Australia, where labor rules, it is almost a shock to come direct to Java where labor is an exceedingly cheap and plentiful commodity. Our first lap took us through countries of "cheap labor," then on to New Zealand and Australia, where the "high-priced labor" situation seemed very extraordinary in comparison, until now we come back to "cheap labor" again and it seems almost like "home."

Operations Wait for No Man

It was a shock to be told over the telephone the morning of my arrival that I. P. Oosthuisen was in the hospital, but that I should come to his office as soon as possible. After taking the usual auto drive and having lunch at the Hotel Des Indes (which is pronounced as Hotel de Zend, or something like that) I had the pleasure of meeting Mrs. Oosthuisen, who cordially greeted us and gave me the particulars as to Mr. Oosthuisen's illness. He had been expecting me and had made preparations for me to visit various plants; but three or four days before he had been stricken and sent to the hospital, where an operation was performed,

and he was at that time on the slow but steady road to recovery.

I was most interested to learn that A. King of Hongkong was due to arrive in about a week to assist Mrs. Oosthuisen until her husband should be able to take charge of the interests of Linotype & Machinery, Ltd., and I regretted my earlier arrival and his later one, for it would have been a happy coincidence to have seen him again.

"Time Out" for the Afternoon

Had I known the peculiarities of Java business, I would have foregone the "scenery" in the morning and interviewed the printers then, instead of waiting until the afternoon. I was not aware of the general custom of closing all business houses at one o'clock, and not opening up again until late in the afternoon, or in some cases closing down entirely at two or three o'clock in the afternoon. This fact made it impossible for me to see many of the *Batavia* and *Weltevreden* plants I had planned to visit. Other matters also interfered, but were not sufficient to stop me from having some very interesting experiences and possibly helping me to understand more about printing in Java and the methods of doing business in that far-off country.

As the *Bataviaasch Nieuwsblad* office was close by Linotype & Machinery, Ltd., we decided to visit the manager there first, but knew it would be useless to go before two o'clock. At that time I sent my card to G. Molenaar, the "managing director," and after an impatient wait we were told he was "out," but that if I would return at four he would receive me.

This disappointment was fully compensated, however, by meeting J. Elton, director of the celebrated G. Kolff & Co., and a trip through their bookstore and large printing plant was intensely interesting. Unfortunately, S. Terweij, the managing director, was out of town, and I did not have the opportunity of meeting him, but Mr. Elton gave liberally of his time and assisted me most generously.

Plenty of American Presses

For the first time since leaving America I saw the old familiar "drum cylinder" press, now used only in country newspaper offices and some poster plants in America. Most of the presses were American two-revolution presses, turning out a fine quality of

halftone and color printing. The drum cylinders were small sized and were doing commercial printing such as I have always believed could be profitably handled on such presses in America. For some reason these presses have been confined almost exclusively to newspaper and poster work.

Two rows of American platen presses greeted my eyes, with a few German presses of the Victoria type. One of the platens boasted an automatic feed, so generally used by us, but upon inquiry I found it was usually "up in the air" and the press was fed by hand. The machine was all right, but the native operators threw it out of gear and fed by hand instead.

The "Fly Boys"

When cylinder presses were first invented they did not have the "printed-side-up delivery" with which we are all so familiar. As a matter of fact, the first cylinder presses had no delivery whatever. For the purpose of taking the sheets from the cylinder, boys were used to catch the sheets "on the fly," and they were called "fly boys." From this came the word "fly" to designate the apparatus that delivers the sheets from the cylinder after being printed.

I had never seen "fly boys" until this visit to Java, and then only on two or three lithograph presses printing from stones. The presses had come with "flies," but it was found better to use natives to take the sheets from the stop-cylinder machines and deliver them "printed side up." Where help is cheap, using two or three boys to a press entails no great expense. The boys get probably twenty or twenty-five guilders a month, amounting to \$8.00 or \$10.00, or less.

Offset Presses

The offset presses in this plant of G. Kolff & Co. were of French make, and by curious chance the feeding devices were of German make! The head pressman was a Frenchman, with several native helpers, and the presses turned out some very excellent color-work. The two-color offset press was producing attractive labels.

When I saw a long row of slugcasting machines, all operated by native boys who hardly understand a bit of Dutch, yet turn out excellent work, I could not help but think of that long description of the difficulties to be

overcome and the expert knowledge required to handle one of these machines, as set forth by the labor union in an "award" case in Australia. To one uninitiated, the slugcasting machine seems wonderfully complicated—it seems that no less than an engineer of excellent intelligence, skill, and wisdom can keep the metal at just the right temperature, pull the levers at just the right time, and so on. The remarkable fact is that these machines are so wonderful that a Chinaman, a Malay, a Filipino, or almost any sort of a native with a little training can operate one almost as well as a white man, and get excellent results.

The essential thing is the service the manufacturers give, even in distant

Regardless of the fact that labor is plentiful and very cheap, most of the machinery is up to date, being brought from all parts of the world, and always of a labor-saving kind which will also produce the better grade of printing.

The hand composition department interested me most, I am frank to say, despite the operation of fine printing machinery by natives, some of whom wore very little clothing. In the bindery there were numerous men doing "girls' bindery work," although a few women were also employed.

The first things in the composing room that impressed me were the low type cabinets. They were about four and a half feet in height. For each of the native compositors a stool was provided so

We then discussed this seemingly queer idea that is used by the oriental and the Latin alike in Havana and Java. In Japan and China I saw the same thing, and doubtless I shall find it elsewhere. Steel adjustable composing sticks are supplied, but the native compositors exert much ingenuity to overcome their use. It seems almost unbelievable, but it is quite true that they will set several lines of six-point type, using only their index finger for spacing, and then "lift" it on to the galley. I tested some of the lines of type and found them spaced almost as well as the work of our compositors. I can not conceive of an American compositor making any headway under such a method. In fact, one soon learns on such a trip as this not to try to figure out anything from an occidental standpoint, but to try to get the oriental idea. Only by such deductions is it possible to comprehend many things as they are done in these lands.

Publications of Java

In addition to lithographing, letterpress printing, halftone and zinc etching (or "block making" as they call it), steel die and copperplate printing, G. Kolff & Co. are publishers of the "Inland Printer" of the Straits, better known as *Grafisch Tydschrift*, or *Typograph Magazine*. They also publish *D'Orient* and *The Inter-Ocean*. *D'Orient* is an excellently printed magazine in the Dutch language, with articles and stories of interest to East Indians. *The Inter-Ocean* is the official organ of the United Netherlands-American chambers of commerce at Amsterdam, New York, and San Francisco, and is designated "A Dutch East Indian Magazine covering Malaysia and Australia." It is an illustrated magazine giving much information about the East Indies, and particularly Java and Australia.

It is impossible to have any sort of a timekeeping system, so costing is out of the question in Java. Although several attempts have been made to introduce time sheets, the only result has been much trouble and misunderstanding, as the natives view the matter in true oriental style and will have none of it. To try to secure a new crew only means additional trouble, as the natives have their own way of spreading "news" of such events.

As a guide, a price list issued by *Federatie der Werkgeversorganisaties in het Boerkdrukkersbedrijf* (Federation of Employers Organizations in the Printing Business) is much used, and a copy of the latest, issued in May, 1926, was given me. As I intend to visit Holland before I return, I shall



Batavia

countries, where they keep an expert ready and qualified to lend his services should anything go wrong, to make repairs, and to supply worn-out parts. Except to obey simple rules, keep the machines clean, set the regulator on the electric pot at the right temperature, and feed the slugs or metal to the pot, the rest seems to be easy. It must be, or the men I have seen operating them would never be able to keep them going and produce such good work.

A typesetting machine, with one keyboard and two casters, was also operated by natives, or what seemed to me to be only the ordinary class of workmen—there was nothing very superior or extraordinary about them.

In the bindery a native was handling a German book trimmer equipped with three knives and trimming three sides of a book at one clamping. Very proudly he showed me how the "safety" device worked, demonstrating how the machine would stop instantly so there could be no possibility of a man getting hurt.

that he might sit at his work instead of stand. I think the Malays or Javanese would rather sit down than do anything else in the world. The novelty of the low cabinets and the stools impressed me strongly, and I watched the boys for some time as they sat combining ease with necessary work.

Line Testing With the Index Finger a Common Practice

Something about the way they worked also struck me as being familiar, and then I thought of my first experience in Havana, of the wooden composing stick and the spacing out of the line by using the index finger as a "line tester." I asked H. Vervoort, the superintendent of the composing room, if the boys spaced out the lines by adjusting their composing sticks, and he said they did, but was frank enough to say that only with much difficulty could they be made to do this, and unless watched very closely they would start the "index finger method" at the least provocation.

probably write of the activities of this federation or association.

At the Hotel des Indes, I saw a copy of the *Java Star*, which announced that it was "the only newspaper in the Dutch East Indies printed in the English language, circulating in the Dutch Archipelago, Europe, America, Asia, Australia, and Africa, issued twice weekly." When I was looking up the publishing address, Mrs. Oosthuisen informed me that it was not far from the government printing office. Directing her boy to drive us to the latter, we started on our journey again, not without regrets that we could not stay longer at the plant of G. Kolff & Co., to talk with the superintendents and managers of their many interesting experiences.

At the government printing office I was doomed to disappointment, for the office was closed. Despite the "Verboden" sign, we went in and finally discovered a Dutchman who could speak English. Our errand was explained to him, and he said the managing director had gone home for the day at three o'clock, and he could not let me see the plant or give me any information without permission. He promised to take the matter up with the director, and to send me the information I asked for, which I hope he will do.

"There Is No Tomorrow"

The plant is located in a group of one-story buildings about an open square, and I felt peeved at having missed the opportunity to see it. "If you come tomorrow," the gentleman said—but he got no farther. "But there is no tomorrow," I put in. "By that time I shall be elsewhere, and the ship sails tomorrow at six o'clock for Singapore, and the next morning I go to Buitenzorg. Isn't it possible for me to go inside and for half an hour look over the plant?" Even this made no impression, and it being "impossible" there was nothing to do but drive away.

And all because I did not know that mornings only were reserved for work, and the afternoons to idle. Truly, the Dutch have their own peculiar ways; perhaps it is because of the heat of the mid-day and early afternoons that the shops close and everybody goes home to the coolness of their porches, coming out again after five or six o'clock to complete the day's work.

Better Luck This Time

Nothing daunted, we started out again, and after some little trouble found "Matramanweg 155 Meester-Cornelius Bz." Here we received a somewhat different welcome, for al-

though F. C. M. Stuurke was taking the regulation afternoon rest, he bade us welcome and we had a fine friendly visit with him. Only five issues of his paper had been printed so far, but the English and American contingents have welcomed it, and he seems to feel there is a big demand for it in other parts of the East Indies.

It seemed good to sit on the broad porch, smoke our cigars and cigarettes, and talk of conditions in Java, Australia, Ceylon, the Straits, and all over the East. Although Mr. Stuurke is a Dutchman he speaks excellent English, and his form of writing is interesting, if a little stilted, and he often uses words which are not quite correct but can be interpreted to conform to his

everywhere in the East. He is the industrious manufacturer, merchant, and banker. Truly they call him the "Jew of the Orient." He is not the washerman, cook, and gardener as we know him in America, but a manufacturer, hiring either native or Chinese workmen. Where there is a store, there you will find Sing Lee, with his smile, making his profit.

Next day we heard that Mr. Oosthuisen was much better; he sent us regrets that he could not see us, and that he was unable to show us the many things he had planned we should see.

On the Road to Mandalay

Laden with bundles of wonderful batik, dolls, swords, canes, bamboo



Java

meaning. One of his difficulties is in being compelled to have his paper printed by another establishment, inasmuch as he has no plant of his own, but possibly this will come later.

The "Americano" Speaks His Mind

As it was near four o'clock, the time of our appointment, we hurried away and presented ourselves once more at the office of the *Nieuwsblad*, expecting to be ushered at once into the presence of Mr. Molenaar. But it was not to be, as a young Dutchman explained that the "Directeur" was in "conference" and that he would see me "perhaps" tomorrow. I am afraid I told the young Dutchman some things in true American form which I am sure the "Directeur" heard, and that what I said gives him a still worse impression of those wild "Americanos."

I had a chance to visit one or two other small plants, including a Chinese plant where they had a new two-revolution press of which they were immensely proud. You will find John Chinaman

things, and what not, we returned to the *Carinthia* only a short time before Mrs. Oosthuisen arrived to see us off. There were a few at the dock as the *Carinthia* set out fifteen minutes before time, with everybody safely on board, and once more we were on our way out to the sea, to cross the equator once more and travel on to Singapore and more adventures, whether they be printers' adventures or otherwise.

I must not forget to mention "rain." Those of you who have witnessed the play "Rain" may think you have received an impression of what rain is in the tropics, but I shall never be able to see it again and think of it without laughing. It is too poor an imitation of the real thing. We were thankful for it, however, as it tempered the heat, and as we crossed the equator there were more rains, and a breeze that was like a cooling breath, and, instead of suffering as we did before, it was a day of delight and one to be remembered for a long time. Yes, this business of traveling has its compensations!

Departmental Systematization of the Printing Plant

Part III.—By DANA EMERSON STETSON

IT has often been pointed out that many printers do not really know whether they are making money or losing money. This statement is open to discussion and may be qualified in many ways. The common processes of reasoning should indicate to the average individual the fact that he is making money, and, *vice versa*, the fact that he is losing money. The suggestion that the average printing plant manager is quicker to realize the revenue on the profit side of the sheet than the figures in red ink is quite sane. It may be concluded, then, that the employing printer knows well enough when he is making money.

Now, we enter upon a study of the various qualifications of the subject. Many printers, undoubtedly, would require a little time to determine their exact margin of profit. The inference is obvious: The less time required to ascertain this vital fact the more effective the system of the printer. Good systems, as a rule, possess some phase of perpetual inventory. On the other hand, it is really difficult to define what actually constitutes a poor system. The reason for this lies in the many disrupting factors so characteristic in the inefficient analysis of daily cost and production figures and their ordinary tabulation.

Numerous systems are weak in that too much time and effort are required in their application. It has been hinted previously that one man should operate the system, and it is clearly seen that systems operated by more than one man may soon develop difficulties.

The declaration that entirely too much attention is now given to costs will provoke wrath in many quarters, yet in a large measure it is true. Costs should be determined definitely when estimates on work are made. The manager of the printing plant must be made to realize, if he does not already realize the fact, that the buyer expects the printer to hold to the figure he quotes. That figure should make ample provision for contingencies. Merchandising and production are similar. The employing printer knows at all times just how much it is costing him to keep salesmen out after business, because he knows the contents of their pay envelopes. It is easy to check sales expense

from the moment it begins. The sales manager knows how much his men are worth and simultaneously he provides for contingencies.

System Fixes Costs Before Work Begins

Proper systematization enables the printer to fix costs before the work is started on its way through the plant. Mistakes are better avoided at the beginning than halfway through or upon completion of the job. As a case in point, a certain printing concern, long in business, with elaborate offices and equally elaborate facilities, gave a quotation on a certain piece of work. The printing salesman was supplied with dummies and complete specifications. These were given to him by the advertising manager of the concern purchasing the printing. The printing company had in operation a very intricate system, the success of which depended upon the efficient action of some four or five individuals. The buyer accepted the printer's quotation. Upon finishing the work the printer found that he had lost money and had incurred the ill will of his customer. The blame was placed on costs.

The circumstances of the case were as follows. The work consisted of the printing and binding of fifty thousand booklets printed on fairly substantial coated paper. The booklets were saddle-wired with a single thin staple. Specifications, which formed the basis for estimating, called for two heavy staples. Prior to the run of the last twenty-five thousand booklets, certain prices in type were removed from the forms. Each price was a display line, cast ten on twelve, whereas the body text of each page was eight on ten. Specifications, given originally by the buyer, included this provision. Although no explanation of the latter provision need be given, it may be stated that the buyer wished to distribute half of his booklets to retail customers and half to wholesale accounts; the change was therefore necessary.

The printer lost money and blamed costs. Here is what really occurred. The single thin staple failed to hold the cover of the booklet and the center-spread. These pages worked loose just as the buyer was placing them in enve-

lopes for mailing. All copies were returned to the printer and rewired with two heavy staples. This work was done, naturally, without charge to the buyer. The printer in making his estimate forgot, or more strictly speaking, one of his five systematizers forgot, to prepare figures for removing the display line before the run of the last half of the job. The amount of the loss, or rather the extent of the loss, may be surmised readily, when one considers the details involved.

How Mistakes Are Made

Admittedly, the cost of rewiring the booklet was a very definite cost, as was the cost of removing the slug. The printer absorbed each cost, with no revenue to defray this absorption. The inside facts concerning these difficulties probably have not been established satisfactorily to this day. Why? Perhaps one of the five systematizers knows the answer. Perhaps the supply of No. 1 wire was exhausted when the booklets came into the bindery and the foreman thought it quite all right to employ No. 3 for the purpose, owing to the fact that there was no wire of No. 2 gage at hand. As to the removal of the slug, it is highly possible that one of the five systematizers took it for granted that the pressman could skip over the four sixteens with a penknife.

Speculation, however, is idle. The printer blamed costs. Indirectly, costs were to blame, in that they consisted of expense to the printer, with no return for the extra labor, time and overhead. Directly, however, carelessness was to blame, brought about by lack of sound systematization.

Working Conditions Must Be Satisfactory

The human element can not be accentuated too strongly. Too much stress can not be placed upon working conditions in the plant, such as heat, light and ventilation. There are plenty of good books available on the subject of worker psychology and physiology, the mental and physical reactions of the employe under varying conditions, and one may find many helpful suggestions by reading such works.

We are certainly reaching the root of the matter when we recognize the

fact that men must be checked as well as costs. Most assuredly the work done by men should be watched more closely than figures. It is comparatively easy to secure the services of a good cost accountant, but it is an unusually difficult problem to analyze the capabilities of an experienced systematizer. We have plenty of good cost accountants, but very few good systematizers. The printing industry needs men big enough to operate systems which are sound and dependable.

There is a flaw, then, in the system which revolves about costs and nothing but costs. The plan of systematization based solely on estimates is worthless. The systems which embrace only speed of presses, rapidity of delivery and daily productive capacity represent so much wasted energy.

Balance is the key to successful systematization. By balance we mean equalized distribution primarily, of work, of supervision, of procedure, and of costs. In each of the four roughly indicated divisions, the human element plays the leading part, even in the matter of costs as has already been demonstrated with sufficient clarity. Figures are inanimate. This may seem ridiculously obvious and academic, yet many printers will insist that figures are the life-blood of their business, which is plainly a fallacy. Figures are but minor corpuscles. The major, constructive corpuscles are human beings. These latter corpuscles may also be destructive, voluntarily or involuntarily, as some printers have learned to their cost. It is not the intent of the writer to attempt to encroach upon the preserves of the psychologist, as there is an abundance of information on the subject at the disposal of all who are interested.

How Systems Go Wrong

Many systems, fundamentally sound from the viewpoint of cold calculation and potential productivity, have failed because the worker equation has been subordinated. A dissatisfied individual, troubled perhaps by personal or domestic affairs, may wreck havoc in the printing plant. The manager of the plant can hardly be expected to pry into the intimate life of his employees. His chief aim should be to stop mistakes at their inception, and his job is to devise a system which will keep him informed of the activities of his employees during working hours.

The printing business is unique, therefore its problems are peculiar. Printing, in a sense, is a type of manufacturing, yet it is much more creative than the ordinary business of manufacturing a given article. Because of this creative phase, systematization in the

printing industry is highly specialized and extremely difficult. Here is more indisputable evidence that the human element in the printing plant requires close attention. Due to the constant presence of the creative factor, which is decidedly human in its aspects, errors are liable to occur quite frequently even where printing establishments are carefully regulated.

The executive in charge of printing plant administration and production, therefore, must know what is transpiring within his organization. His means to this end must be broad and philosophical, and very human, as opposed to arithmetical application and occasional tabulation of progress. If this attitude

is assumed misunderstandings will be less frequent, and frankness in all departments will become more a matter of course, which state of affairs is much to be desired.

The first step is to recognize the fact that the printing business is in a distinct class by itself as far as systematization is concerned and that plant requirements vary materially. A thorough understanding of this fact will open the way to clear thinking and planning. The system to be evolved, then, can not be general in nature or application, but must be essentially specific. Such a system will be explained in detail in the June issue of THE INLAND PRINTER.



The Growth of a Giant

By MARTIN HEIR

PERHAPS nowhere else in the country have the value and importance of a new idea been so thoroughly proved as in the beginnings and development of the American Art Works, Coshocton, Ohio; and perhaps nowhere else has a new idea so aided the constructive interests of a town and its surroundings as has this new idea.

Some forty odd years ago J. F. Meeks was publishing a weekly newspaper in the then almost dormant town of Coshocton, supplementing a scanty income from the business with such odd jobs of printing as the town afforded. But the living was precarious. Rarely could he meet his Saturday payroll, and when he did nothing was left for the wife and kids at home. Many a Saturday night and Sunday the editor-publisher and his dependents looked at each other over an almost bare table.

The printing plant wasn't much of a plant, as plants are known today. Besides the drum cylinder—or was it a Prouty?—on which the paper was printed, Mr. Meeks owned a Golding jobber, far from new, and a few fonts of worn type. The imposing stone was nicked and furrowed from the assaults of iron shooting sticks on wooden quoins, and the chases of both jobber and cylinder were as free from curves as an egg. The staff was similarly tattered and torn.

The New Idea Breaks

But one day a novel idea spread itself before the work-worn printer—an idea which literally brought a glimpse

of prosperity. It was nothing big, nothing revolutionizing; simply an imitation greenback with a few lines of advertising from a local grocer, stating that if presented at his store it would be accepted for a certain amount in trade. You know the kind; hallways and porches were flooded with them thirty and forty years ago, and even more recently. But in this simple advertising trick the poor printer of Coshocton saw the germ of a great business. From then on Meeks ceased to be an order-taker; he was a creative printer.

At first the advertising novelties produced were crude and almost worthless, but they gradually improved in refinement and usefulness. Children's school bags, with the name and business of some merchant in heavy letters on the outside, created good will for the advertiser and plenty of work for the Golding jobber. Then followed foot-rules, yardsticks, paper bags, etc., all with appropriate printed messages. In other words, it was novelty or specialty advertising as we know it today. The business thrived until it outgrew the small printing plant and enlarged quarters were necessary.

They Follow the Pioneer

Other men, of course, quickly awoke to the possibilities of this new advertising. When one man develops a valuable idea and is reaping the harvest of his ingenuity, or foresight, others are always ready to step in and share the harvest; and so in this case. Only a short time after Mr. Meeks had organized the Tuscarora Advertising Com-



Assembly of Buildings of American Art Works, Coshocton, Ohio

pany, H. D. Beach established the Standard Advertising Company, also at Coshocton. Fierce competition was the natural result, with its usual accompaniment of lost profit and debt. In 1901 the rivals consolidated under the name of the American Art Works, with Mr. Beach as president.

Lester Ealy, writing for the *Columbus Dispatch*, relates numerous interesting facts about this great concern. "A faint glimpse of the growth of the organization during the past forty years," he says, "can be gleaned from the development of the sales staff, which at that time was made up of three men who had the whole United States as a territory in which to work. Today hundreds of men in leading cities of the world are employed on the sales staff of the organization.

Attract Old World Artizans

"With printing and manufacturing facilities of importance now at their command, the companies began not only to broaden their market, but also to attract skilled workers. From Berlin, Paris, Munich, and other leading art cities of the world came talented artists to Coshocton to teach the workers the processes of reproduction which evolve colorful signs, beautiful art calendars, and other mediums of advertising.

"According to officials of the American Art Works, the first attempt in the United States to print metal by the lithographic process was made in Coshocton about 1895 in one of their plants. Although they tried to print a metal sheet on a cylinder press, the attempt proved a failure, and they appealed to R. Hoe & Co. to send them men to help solve the problem. One of the six experts sent, it is said, discovered the 'blanket' process from which the present popular offset method is claimed to have been developed.

"From the two-story brick building of nearly half a century ago, where sixteen men and women were employed, the American Art Works has grown to a plant covering eight acres and employing more than six hundred people.

"Probably the most interesting of all the factories are the metal and calendar plants.

"History of the metal plant goes back to the early founding of the ad-

vertising corporation. The factory was built by Beach in 1891. When the two organizations consolidated in 1901 the Standard Advertising Company was made into an exclusive sign manufacturing plant.

Signs by the Carload

"At this plant signs of all sizes, of any design, of any color, and for all purposes are manufactured. Often a carload of these signs is sent out in shipment to one customer. Among the larger shipments made last year was one of 400,000 signs to one customer



Charles R. Frederickson
President, American Art Works

and one of 300,000 signs to another. Most of the signs are manufactured for national advertisers.

"From eight to over one hundred operations are required in the manufacture of these signs, depending upon the kind of sign or device wanted, size, and contemplated use. The manufacturing process starts with the cutting of huge strips of metal. Other steps include printing, trimming, embossing, adding black frame or turning edges, and the insertion of chain, cord, or holes for hanging. Each of these processes may require a number of operations as, for instance, the printing which requires from ten to twelve press runs.

"Little does the average person realize the expense and work necessary in the manufacture of calendars. First, a desirable painting is obtained. Often these paintings, which are reproduced and made into pictures for the calendars, cost from \$200 to \$1,500. Often a sum of more than \$1,500 is paid artists for publication rights alone. Then plates are made for reproduction. Practically all calendar pictures are reproduced by the four-color process. Following these steps the print is then mounted on a single, double, or triple mount back, on which is printed the advertiser's message.

"Of interest, too, are the various other departments of this organization. In the leather department one could spend hours watching the forty-five operations through which the average leather article must go.

"It has taken generations of workers to develop the beautiful color work that appears on art calendars and signs, and to train craftsmen in the making of leather and celluloid specialties of the required quality.

Company Holds Workers

"How these workers have shown their loyalty to the enterprise and their interest in the creating of its products is best told in the statement that one valued employe has given forty years' continuous service, while many others have served from twenty-five to thirty-five years. The president of the company, Charles R. Frederickson, is proud of the fact that his connection with the company began in 1901 as a salesman in the Kansas City office."

Mr. Frederickson is chairman of the committee of the International Advertising Association, which has charge of the advertising display for the convention in Detroit this summer. He was also chairman of the committee which staged the advertising display at the convention in Philadelphia during the Sesqui-centennial Exposition. For two terms he has been president of the Ohio Manufacturers Association and for one term president of the Advertising Specialty Association. In 1926 he was chairman of the Ohio republican campaign committee, and was one of the presidential electors from Ohio at time of President Harding's election.

THE PRESSROOM

By EUGENE ST. JOHN

The assistance of pressmen is desired in the solution of pressroom problems, in an endeavor to reduce the various processes to an exact science. For replies by mail enclose self-addressed stamped envelope.

Large Solids on Linen Finish Cover

We are enclosing samples of some work which we recently ran off on cloth-of-gold cover. We are at a loss to understand why this job should have acted as it did, and trust that you can enlighten us. We had a special gray first time through and a special red first time through prepared for this piece of work, but found it necessary to print each color twice in order to get a good result. This necessitated running this sheet through the press six times, twice for each one of the three colors. This was run on a job cylinder on which we have done all types of work, including three-color process, and we have never yet run into anything of this nature.

A much more thorough makeready and stronger impression are required when printing solids on linen finish cover than on the smoother papers. The forms should be made ready to print on a smooth paper and then the overlays must be reinforced and cutouts pasted on the sheet next below the drawsheet. The extraordinary impression required often leads to overpacking the cylinder, which may be avoided by placing some of the extra sheets under the plates, thus allowing the cylinder to ride the bearers. The packing should be the hardest. The idea sometimes advanced that a sheet of rubber in the packing is helpful is "the bunk." Rubber is all very well on an offset press where the printing is from a plane form, but when you are printing dots and lines on a letterpress machine rubber can only yield a matrix producing dots and lines in the print larger and broader than those in the form. For the job you submit you require for the gray the very best cover ink, stiff and dense. The press must be run slowly if the full covering capacity of the ink is to be had. This point is often forgotten, but is of utmost importance, as the same stiff ink may cover in one impression running slowly and take two impressions to cover running at high speed. For the red and the black plates, which are not so solid, any good opaque cover red and cover black will do. You will need the same thorough makeready with cutouts and for best results you must run the press slowly. On the gray form you will have to carry a flood of ink. It will be necessary perhaps to use slipsheets, and then you must be on your guard against the

printed sheets sticking to the slipsheets. Special Kraft slipsheet paper is best. Remove the stock from the delivery in small lifts and examine every hour until dry. Another trouble to be avoided is slow drying of the gray when run heavy. Have the inkmaker prepare the gray to dry in twenty-four hours at 70 degrees. Sometimes cover white and cover gray require a week or two to dry on hard paper if not prepared to dry promptly.

Halftone on Imitation Parchment

A local firm here has a picture of its place of business which it would like to have reproduced on its letterheads, of which there are 10,000 on hand, already printed, but without the picture. These letterheads are on Strathmore parchment. Would it be possible to print this cut on that kind of paper and, if so, what kind of a cut should I have made, what kind of makeready, and what ink should be used? I would have to do the job on a 10 by 15 press.

A highlight halftone, 120-line screen, is the best. Hard packing, a thorough makeready, and bond ink very stiff and dense, are required. Run slowly for best results with very stiff ink. If the cut is large, run the head of letterhead to the two bottom gages. Make the cut ready to show up clear and strong on a smooth sulphite bond first, and then reinforce the overlay with additional patches for the parchment bond.

Slur on the Gripper Edge

We are enclosing herewith two specimen sheets. You will notice we have made a note on one of the sheets. Any information you can give us in regard to our trouble will be greatly appreciated. These sheets were run on a cylinder press.

A slur on the gripper edge, which occurs not on every sheet but now and then and worse on one sheet than on another, is oftenest due to the rollers not being in good condition and not set with sufficient and the same contact to both the ink plate and vibrator; to inaccurate set of feedboard, tongues, grippers, sheet bands, and brush and to uneven packing on the gripper edge of the cylinder. From the appearance of the sheets you submit the initial cause of this slur seems to be in the condition and set of the rollers, and it may be aggravated by the edge of the sheet not lying flat on and hugging the

drawsheet when going to the impression. Check feedboard and tongues for height, grippers for even bite and best location, drawsheet for even edge, bands and brush for distance from drawsheet. When the sheet is not flat at the gripper edge, due to wave or curl, it may be necessary to change the position of the grippers in order to avoid a buckle. Sometimes raising the end grippers a trifle helps the sheet to stay flat. The bands and the brush should be set a little closer in the center than to the ends of the cylinder.

Three-Color Print on Halftone Writing Paper

I am enclosing a sheet of letterheads which we have just printed and which gave us trouble regarding offset. The stock is halftone letter and was printed on a job cylinder press under ordinary conditions. Lamps were used to prevent offset, and the stock was piled in 500s just as it was delivered from the press. The blue tint was printed first and, two days after, the black was run. It showed offset and then the red was run and it, too, showed offset. The tint and red inks were sent us for the job. The black was a combination made by our pressman of halftone and bond blacks. How could the offset have been avoided? If you have any suggestions to offer us, we will greatly appreciate it. Perhaps some of the trouble might have been averted if the stock had been piled in smaller takes. As the stock is heavy, it tends to cause offset.

Running the job as you did, offset might have been avoided by printing special concentrated red and black on the blue before it was bone dry—just well set. In addition you would need a gas or electric sheet heater on the press. It would help to run slowly on such a job. Very important is the manner in which the sheets are delivered and handled after delivery. The sheets should float into a box slightly larger than the sheet on a cushion of air. The jogger should not be used. The sheets should not be piled high nor moved about in the pile, but the pile lifted on a board or tray from the box. The box should be slotted for air and be heated moderately. The latest in offset prevention is to have three heaters on a cylinder press, one between the table of the automatic feeder and the grippers, another on the delivery, and a third below the stock table or box where the sheets are delivered. This job could be

run with less danger of offset by printing the opaque red and the opaque black first and printing a transparent blue over the opaque inks last.

Paint and Varnish Color Cards

Enclosed is a copy of a paint color card, and I would like to obtain some information as to the making of these cards. Is there any machine on the market to put these color samples on any other way outside of the hand process? If there is, could you furnish me with the names and addresses of the manufacturers so I could write to them? Are there any houses where the sheets of paint samples can be obtained?

Some painters print sheets on the printing press in assorted colors in one impression by using split rollers and fountain dividers. Others prefer to show the paint itself and have an expert painter paint a large sheet in a single color. After printing or painting, the sheet is varnished (if not a flat paint sample) if desired. The large sheets are then cut up into the little color samples on a paper-cutting machine equipped, in addition to the regular gage, with a second gage secured to the front edge of the feed table. All the small color samples are then placed in the color-card machine, which is fitted with numerous small, deep boxes. One color of sample chip is placed in each box. The color card, previously printed, with proper spacing of blanks for the samples, is fed into the color-card machine which automatically glues the little samples on.

Preventive of Impression on Reverse of Sheet

Some time ago I worked in a shop where a sort of mica sheet was used directly under the drawsheet on a Gordon and a Colt's press. This hard sheet of mica, of course, was used to get away from the matrix formed from continual impressions on the tympan. I'd like to have you furnish me with the address where I may obtain this mica or whatever you may suggest as a substitute. I'd appreciate your comment on the practicability of this or similar articles.

A flat, thick sheet of dull celluloid or rolled, ground, and polished photo-engravers' zinc of the thinner gage is considered best for this purpose. The flat, thick sheets of celluloid may be had of leading stationery stores. During makeready the hard sheet is kept next to the platen so that the impression on the reverse may be studied for marking out for overlays and underlays. After the sheet shows an even impression on the reverse and all units print sharp and clear, the hard sheet is withdrawn from the bottom of the packing and placed close to the draw-sheet; next to it if the form is new and a sheet or two lower with old forms.

Gold Ink on Varnished Cards

I would greatly appreciate it if you could inform me of some known method, either in mixing of ink or condition of press, rollers, etc., to satisfactorily print gold ink on the reverse side of playing cards of the highly glossed or linen finish variety. Have been experimenting along this line in anticipation of several orders and

it is my desire to produce them as well as possible. I do not seem to be able to get a rich gold color and as two impressions (one size and one color) are out of the question, I am at a loss to know how to proceed further.

Two impressions will be necessary for gold, either base first, followed by gold ink, or two impressions in gold ink. A cover ink of some color like red or green will take in one impression. When gold is printed on playing cards by the manufacturers the gold ink is printed on the card before varnishing. Also you may print in a stiff size and bronze. Really none of these methods will give lasting satisfaction because any ink will rub off the varnished surface with use. For a permanent print the cards should be varnished after imprinting the backs.

Several Ink Problems

Can you assist me in determining the cause of the fugitive red blotches which appear on the sample covers I am enclosing? These blotches appear to the left of the horse. The colors were run, yellow, red, blue, and black, and matched the proofs well till the black was applied, when the blotches appeared at different places. The printed sheet, prior to printing the black, failed to show these irregularities. The red did not dry satisfactorily, though I consider this irrelevant to the trouble I mention. In my experience I have never had this occur, and your opinion is respectfully requested. When printing a transparent ink over a halftone I find that the ink has a tendency to shine on the darker portions of the halftone. Can you suggest the cause and remedy? I use a high-grade halftone black which seems to rub off the paper too readily.

The red ink either was not ground properly or some crystalline substance like wax or gum camphor in appearance was added to the red ink, as the glittering little specks are easily seen. Also, the red ink caked and filled. Other causes of the changed appearance of the print on different sheets are variation in register and variation in the quantity of yellow, red, blue, and black during the runs. When the overlap prints glossy you may overcome the gloss either by using a halftone black toned with a less iridescent blue than reflex blue or by trimming one of the plates with an engraver's tool until there is no overlap. Halftone black may be had either slow, medium, or fast drying.

Utilizing Hard Brayer Roller

Could you tell me what to do to soften a brayer that has become hard? It can not be a age that has hardened it, as it was only purchased recently.

Quite frequently a hard roller may be slightly improved by sponging it lightly with tepid water and then rubbing slowly into it glycerin and rose water or glycerin and alcohol mixed. Generally it is more satisfactory to get a new winter roller. A hard roller is fairly effective for pulling proofs if a stiff job or bond ink instead of the common soft ink is used, together with more than ordinary pressure when

rolling the brayer over the form. The news proof paper, if sponged with water, will pick up the ink better. A soft packing also helps under such unfavorable conditions. Really it is better to get a softer winter roller.

Imitation Typewritten Letters

Will you please inform us what grade of silk is best for imitation typewritten work and where it can be purchased? Also we would like to know if usually a lighter type face is used for ribbon work.

Use China silk of the same mesh as the ribbon on the typewriter to be matched. This silk may be had in department and dry goods stores. The typefounders sell type corresponding to that used on the leading makes of typewriters and, of course, for a match of the Underwood typewriter work you should use only the Underwood typewriter type from your type foundry. Oliver or Remington typewriter type would not match the Underwood typewriter. The China silk may be placed on the form and the superfluous silk locked up between the furniture and the form, or the silk may be stretched from one gripper to the other. The ink-maker can furnish a printing ink to match the typewriter ink. For a good match it is necessary to space the lines and indent the paragraphs as on the typewriter. Finally, the touch of the typist and the condition of the ribbon on the typewriter must be considered when matching on the press.

Sheet Heaters and Printing in Register

Can I get a little information from you about the running of three and four color process work and also one and two color register work? Do you advise the using of the gas and electric heaters on the delivery when running the above class of work, and if not, why? Will it prevent the colors from taking properly in process work, and might it affect the register also?

The ideal method, proven very satisfactory, is to install a sheet heater between the stock table of the automatic feeder and the grippers and another heater on the delivery of the press. If the sheets are delivered into wrapping paper and the sheets kept wrapped until the next run, the paper remains in good condition for register and the two heaters may be advantageously used on all the colors. On a press with one heater only and it on the delivery an unseasoned sheet may shrink on the first run, but if the sheets are delivered into wraps there should be little change on the subsequent runs. Sometimes there is one color only on one side and more than one color on the other. In this case running the side with the single color first is helpful. With seasoned paper and a moderate heat the first run does not shrink the paper much, generally a little more at the back end of the sheet. In all cases

the sheets should be kept wrapped between runs. The whole problem is simpler if one or two brands of coated paper are standardized and seasoned for a few days at pressroom temperature with the humidity about normal. If a damp spell comes the paper should be wrapped until the excessive humidity has passed. A moderate heat would not be harmful to a good process ink printed on high-grade coated paper. Of course, one must study the paper and the ink and take into consideration how long one color is to dry before another is printed on it. It may be news to some that the best process inks are made without driers. It is calculated that the natural drying quality of the varnish vehicle, its filtering into the paper to some extent, and the favorable temperature of 75 degrees, together with the siccativ property of some of the pigments used, make the addition of drier not only uncalled for but harmful. Observation will show whether a retarder should be added to process inks when using sheet heaters. Some concerns never use sheet heaters on their register work; others use them freely and both divisions are successful, from which it may be deduced that the heater is not harmful if ink, paper, and atmospheric conditions are studied and given deserved consideration.

Halftones on the Platen Press

We used a mixture of one part reducer with two parts book ink on the enclosed sample. Did we use the correct ink? We seemed to get the best results with this, although it will be noticed that on the hood of the car it picked to some extent. Could we have improved our makeready? Could you please tell us where we could get an instruction book or books of makeready on platen and cylinder flat-bed presses?

A toned platen-press halftone ink is best; no reducer need be used. The picking is due to insufficient impression with overlays on the solids. "Concise Manual of Platen Presswork" and "Practical Hints on Presswork" will help you master the art of makeready on cylinder and platen presses.

Gold Ink

We have coming through, some time within the next couple of months, a job of eight or nine hundred copies of a school publication. Forty or more pages of it are to be printed in black, blue, and gold. This work will be done on a four-roller cylinder press, and we are writing you at this time to ask you to give us information concerning the method of handling this work. We have been told that ink to be mixed as used with the gold powder was the best way. Also that the vibrating rollers must be disconnected to keep the friction from the ink, also that the press must be washed frequently.

While it is not necessary to remove the vibrator rollers, the composition rollers should be in the best condition and set light, with all units of the form type high. In order to get a thorough makeready, perform this work with black or blue ink on the press, and,

after the impression and set of the rollers appear all right, ink up with the gold ink freshly mixed according to directions. When you order the gold ink send a sample sheet of the paper to be used to the inkmaker. The gold ink must be well stirred in the fountain and if the ink piles up excessively on the rollers, as it will if the rollers are not in good condition, or if the ink contains too much powder for the varnish to carry, then the press should be washed up and the body of the ink changed either by adding more varnish or a stiffer grade of varnish.

Fast-Drying Typewriter Ink

The information given me on January 23 was greatly appreciated; however, it was not what I wished to find out. To be exact, what I want is information regarding a ribbon for an Underwood typewriter. I have replaced the type roll with a holder for small varnished wood box fronts. The scheme works fine, making neat impressed letters in the soft, varnished wood, but the ink does not dry on the varnish and rubs off easily. Is there a ribbon made that I could use to produce quick-drying fast letters so the box fronts may be used immediately?

You can get the required ribbon from a concern making ribbons for multi-graph machines, inked with a heavy, fast-drying ink. Dry in a warm room and it may be advisable to varnish the wood after the ink has dried.

Blurred Impression

I have enclosed a sheet of our weekly paper showing a blur. The paper is printed on a press which has been in use fifteen years. A pressman who tuned up our press a few months ago said that the blur was caused by poorly adjusted tension bands. We adjusted our bands carefully and received better results, but at the cost of pinches and tears which in turn caused blurring. We now have it boiled down to this: The print blurs when printing the flexible side of stock, and the print is almost invariably satisfactory when the stiff side of stock is being printed. In the past the press printed nicely with the tension bands in a very loose state of adjustment. We have replaced the muslin which holds the hard packing in place and also tightened our tympan which consists of news stock over the hard packing and an oiled tympan sheet stretched over the whole so that no slack is evident. We draw the conclusion that the press needs some new parts; the ones in mind are the main bearings, but it seems that all papers would blur if it was a mechanical fault. About one-third of the papers printed on the flexible side blur.

Since the blur appears on a portion of the sheets and only when printing one side you may likely overcome the blur by carefully adjusting the sheet bands. If the outside grippers are close to the ends of the sheet, the outside or end bands should be inside of the end grippers. Set the center bands first (after running the press ahead until the cylinder is halfway on the impression) to a sheet of paper a trifle thicker than you are printing upon. Set each band toward the ends, one sheet of your news paper farther away from the cylinder than the center band. If this does not stop the slur insert a strip of two-ply card stock between the bands and the cylinder, extending all

the way across. You may take some of the curl out of the sheets by rolling them out against the curl on the feed-board of the press.

Halftones on Antique Book Paper

We are wondering if you can tell us where to get some information about printing halftones on rough finish book, or similar stock. We have a publication requiring this kind of work and want to make a success of it.

One hundred and ten to one hundred and twenty line screens are commonly used on antique book paper. After you have all the data as to character of the illustrations and have selected the brand of paper, consult the photoengraver as to most suitable screen. You will find the mechanical chalk relief overlay economical and helpful in getting the best results.

Slur Not on Margins

We are enclosing a page of our paper for your inspection. You will note that the column running clear down the page over the patent medicine ad. is blurred. This blur occurs on pages 2 and 3, which run with heads together. This blur has been appearing in our paper for two or three months and we would like to remedy the situation so we can get a good clear print all over the sheet. You will notice the paper is printed very well everywhere with the exception of this single column.

As some of the ad. cuts are punching through the sheet adjacent to the slur, suggest you put the type-high gage on all units of the form and get everything .918 inch. Then put on a new packing, getting it drumhead tight. Clean the bed bearers, which should never have oil or anything else on them. Test these bearers for height (.918 inch) throughout their length, especially opposite the one column that slurs. With the sheet you are printing on the cylinder, lay a straight edge across the cylinder bearers. The sheet should not be more than .003, or one sheet higher than the bearers. More would show the cylinder is overpacked, and should be lowered until light does not show between the cylinder bearers and bed bearers with the form on the press and the cylinder on the impression. If you are not overpacked, examine register rack and segment, which may be loose. These parts will need re-setting, also the intermediate gear, if the cylinder must be lowered. It is possible the slur will disappear after all units are made type high and new packing is reeled tight on the cylinder. If not, make the other tests.

Special Punched Maps for Reeling

One of our friends wants to find out where he can get maps printed which will be about 2 or 2½ inches wide and 25 feet long. He also wants these punched on the edges something like moving-picture films are punched, as he wants to run them over a reel guided with pins on the side.

One of the printing concerns specializing in maps is best equipped to supply the maps described.

Process Lens and Prism Notes

By GUSTAV R. MAYER

Illustrations by the Author

OPTICAL construction as well as the mathematical calculations do not interest the majority of photographers on process work; but the practical performance of these most important parts of our cameras is of paramount interest, as on the lens and prism depends the production of our negatives and positives. The man behind the camera has his hands full with the operating of the camera, photographic plates, and chemicals, all of which require exacting attention to details at every step before the photographic image on the sheet of glass finally travels to the drying rack.

These notes and illustrations present a few of the major details in handling the lens and prism to obtain the maxi-

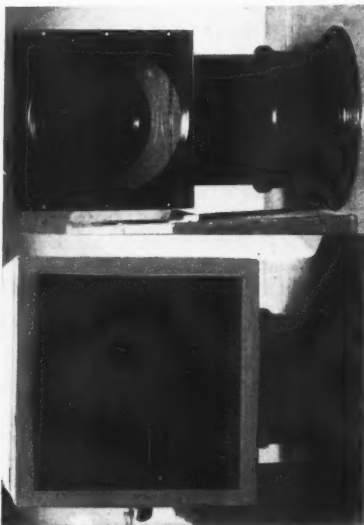


Fig. 1 (above).—Reflections inside prism.
Fig. 2 (below).—Hood prevents reflections.

mum light action on our plates from these beautifully made curved and flat surfaced pieces of glass.

Prisms find only a limited application in the photographic departments of a lithographic plant, as negatives reversed from left to right are not required for offset-press platemaking. In photoengraving color platemaking, prisms are in universal use, as negatives for printing plates intended for the letterpress must be reversed, as printing is direct from the engraved surface and not offset. From what the writer has been told, photoengravers read these articles as lithographers,

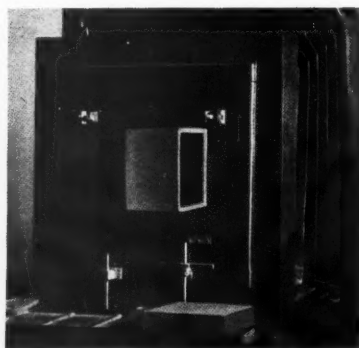


Fig. 3.—Paperbox hood on prism.

and about 99 per cent of present-day process photographers in litho plants are former photoengravers; therefore the space devoted here to the prism will also serve a practical purpose.

Flatness and Sharpness

A lens for process work is constructed along slightly different lines than one for portrait or commercial photographic work. The majority of the process photographers' subjects are flat surfaces, paintings, photographic prints, drawings in ink and pencil, etc. Flatness of field and critical definition or sharpness all over this field are the first two details the lens manufacturer endeavors to put into a process lens.

To obtain the best results from a process lens it is self-evident that the copy board and photographic plate surface should be parallel and the lens attached to the lens board true and square. A warped copy board or camera will nullify all the fine optical construction the lens manufacturer has put into that lens. Line negatives will not be sharp all over and one corner of

the work will be slightly out of focus if the copy board, lens, and plate are out of alignment. More cameras are out of alignment than are lined up.

A carpenter's plumb line, level, and square are three simple tools that will show very plainly how well or badly the camera is lined up. A mechanically true square drawn on bristol board makes a good copy for checking up camera alignment. When this square drawing is focused at any reduction within the range of the lens and camera, all four sides will be exactly the same length if the camera is true; if there is any variation in width at top or bottom, or right or left side, some-

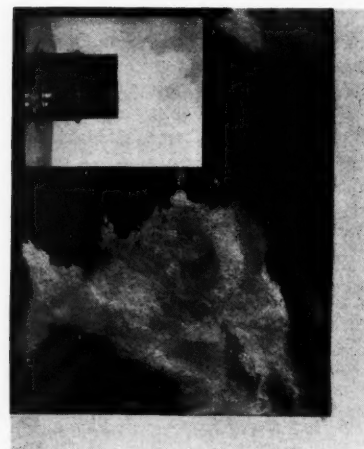


Fig. 5.—Covering power of lens.

thing in that camera equipment is out of kilter. Accurate-sized negatives are impossible on such a camera.

To obtain the best results from the optical part of our camera, it is quite evident that the complete apparatus must function well mechanically to get what we want.

Covering Power

Covering power of our lenses is next in importance. For process work the theoretical focal length, or we might say, size of the lens, should be equal in inches to the diagonal of the largest plate onto which it is intended to project an image. The diagonal of a 14 by 17 inch plate is 22 inches, 16 by 20 inch is 25½ inches, 20 by 24 inch is 31 inches. For plates smaller than 14 by 17 inches a 16-inch lens is perfectly adapted, an 18-inch lens will cover a 16 by 20 inch plate at same size, and a

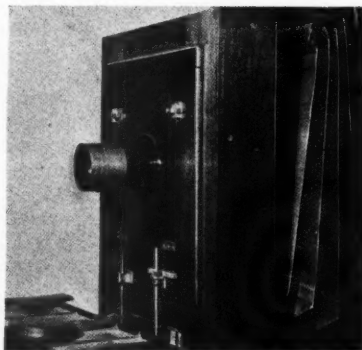


Fig. 4.—Black paper hood on lens.

24-inch lens is suitable for negatives on 20 by 24 inch glass. The figures are obtained from actual negatives made with most of the different make process lenses now on the market.

The lens manufacturers plainly state their guarantee of covering power in their lists. At same size the covering power of the lens is far greater than at one-half size setting of the camera; the farther away the photographic plate is from the lens the greater the covering power when cover-

Expecting Too Much

Many photographers do not grasp this covering power of a lens at all. They expect a lens of say 24-inch focal length to cover a 20 by 24 inch plate at any reduction within the limits of their camera stand. Several complaints have come to the writer that the lens that was in use would not cover at one-fourth size camera setting as large a plate as it did on same size setting. This is expecting too much, and can not be done any more than a ten-ton truck

For black and white reproduction work a lens classified as an anastigmat meets every requirement, but for color reproduction the lens must be of a higher quality in order that the negatives made through all the color filters will all be of an equal size; this type of lens is known as an apochromat. There are anastigmat lenses in which the color correction is of such a high order that these can be used for color reproduction work, the slight difference in size of the three or four color negatives



Fig. 6.—Covering power of prism with round opening.



Fig. 7.—Covering power of prism with square opening.

ing same size or one-half size. One lens maker rates his 25-inch lens to cover a 16 by 18 inch plate at same size and 12 by 15 inch at one-half size. Actual negatives the writer has made with this lens show that the lens maker is too conservative as to what his lens can do, for it easily covered a 16 by 20 inch plate at one-half size camera setting. Another lens maker states that his 24-inch process lens will cover a 24 by 28 inch plate at same size and an 18 by 20 inch plate at one-half size. This lens will just do what the maker claims, and that's all.

Diaphragm to Plate

The distance from lens diaphragm to plate at same size is 48 inches for a 24-inch lens and at half size this distance is 36 inches; at 4 feet the circle of illumination projected by the lens is considerably larger than at 3 feet of camera extension, which accounts for the smaller plate the lens covers at the lesser camera extension.

load can be hauled all at one time on a one-ton truck. The load can be hauled in one-ton portions on the small truck and at one-fourth size with a 24-inch lens the 20 by 24 inch negative will have to be made in small portions with this lens. There are definite limits to everything, even lenses, as we usually find out by experience.

As a basic principle, the longer the focal length of a process lens the easier it is to control the halftone screen dot on the photographic plate. Again, there are limits within which the size of the workroom and camera extension are the controlling factors in relation to the focal length of the lens. One of the most satisfactory lenses the writer ever used had a focal length of 42 inches; at same size this meant a camera extension of 84 inches. Not many cameras will accommodate a lens of this size, neither would many plants care to pay the price for such a lens or have a large enough workroom in which to use it to full advantage.

being hardly visible. A set of color negatives and one contact positive from one of these negatives form a sure and practical means for testing the color correctness of a lens. The contact positive should register with all the other negatives in the set; if it fails to do this, the lens is not good for colorwork.

Size of Diaphragm

When making line negatives with our present-day process lenses nothing is gained by using a very small diaphragm, as was the case with the old rapid rectilinear lenses. In fact, with a very small diaphragm the lines of a pen drawing are actually blurred and not as sharp as when a larger stop is used when exposing the plate. A very good lens in use here makes a very much better line negative at F. 22 than it does at F. 64. At F. 16 this lens makes excellent line negatives, proving that a small diaphragm is actually harmful to good line reproduction with our modern process lenses.

Surface reflections inside the lens combinations or lens barrel or inside the metal case around the prism all produce a certain amount of haze in the negatives or positives. The arc lights illuminate not only the copy but all objects within range. Any bright spots in the lens field outside the margins of the copy will degrade the photographic image. The 42-inch lens mentioned did not make a good halftone screen negative until these outside disturbances had been eliminated by means of a hood on the lens. Without a hood this lens made screen negatives in which the highlight and middletone dots were summum or fogged over.

Effect of a Hood

Figure 1 shows the surface reflections inside a large prism when a very light painting or large line drawing is on the copy board, and Figure 2 shows how a hood on the prism prevents these interior reflections. Figure 3 presents a side view of this hood on the prism, and Figure 4 shows the lens with a hood made from strips of black paper. The hood on the prism is only a paper box lined with dull black paper.

Whenever possible, the writer has always requested a square in place of the usual round opening on the prism front. Several lens manufacturers have told us that it made no difference whether this opening were circular or square. The prism reduces the covering power of a lens and the benefit of a square opening on the prism is clearly shown in the accompanying three illustrations, which are the lower right-hand corners of three 22 by 26 inch negatives made for this purpose. The large painting had a buff colored mat, which helps to illustrate the point I am trying to emphasize.

Advantages of a Square Opening

Figure 5 was made with the lens only, and shows the plate covered right out to the corners. Figure 6 is the result with the prism attached and a circular opening on the prism front. In Figure 7 the circular opening has been replaced by a square opening, and the result clearly shows the advantage of a square opening on the prism. Figure 6 is useless, while Figure 7 will just make the job.

To sum up: For the best lens performance, lens, copy board, and photographic plate must be in alignment; have a hood on the lens and prism to avoid haze in the negatives caused by internal reflections; for the maximum covering power of lens and prism the opening of the prism front should be square in design.

The Artist Says—

By GUSTAV R. MAYER

"Color reproduction by photoengraving and letterpress printing is superior to photolithography and the product of the offset press." He based this statement on actual results from reproductions of his own paintings where the same identical subject was reproduced in both methods of printing. To find which kind of printing made the best impression on the average person who knew next to nothing about how the reproduction was made, a mixed collection of offset and letterpress subjects was shown to a dozen average citizens, and 80 per cent picked out the letterpress reproductions. These specimens were mostly three-color letterpress and four-color offset. Only after six-color offset specimens were on the table did we get an even break between letterpress and offset.

An artist's criticism has real intrinsic value that can be converted into pieces of eight, irrespective of the ideas circulating in the attics of most of us lithographers and engravers. The artist is as vitally interested in a good reproduction of his work as is the man who orders our products with which he wants to sell the goods he handles or manufactures for others to handle.

What Process?

If the painting or drawing meets the advertiser's approval, then it is up to the platemaker and printer to reproduce this painting as faithfully as possible by whatever process the order specifies. Now comes an important detail about what process the order specifies. If this particular artist (who is the leading man in this discourse) has anything to say about what process is to be used, then offset lithography will not get the job.

Why? Because of the soft woolliness and lack of character in the average offset job in three and four colors. The texture and feeling of the original are lost in most offset color reproductions; these "character of original" features do not carry through to the printed sheet in offset as they do in letterpress. Mechanically, most offset press reproductions that appear are clean in general appearance but lack strength, which is not altogether due to the method of printing or the paper stock.

How to Avoid Repeat Business

A four-color offset catalog cover printed by a well known lithographing firm was up for judgment by a jury of artists, one of whom had made the

painting which was reproduced on the front cover. The general opinion was that it was a poor reproduction, and to the writer the job as it stood was a fine start for a seven or eight color job. It is this kind of work that puts a big dent in the lithographer's prospects of getting a repeat order from this firm. Why was such poor reproduction work permitted to leave the photographic and retouching department? Even though the customer O. K.'d the proof, the job was no credit to those responsible for its production and certainly not one that could be presented as a sample to solicit work from others.

If we could only see ourselves as others see us or, applying the old saying to the present case, if we could only see our work as others see it! There is too much mechanics in our photomechanical color reproduction procedure and not sufficient art. The latter must be present to produce good work.

Good Mechanics

A remark made in one plant about the personnel contained far more truth than the speaker realized, when he said, "We have a fine crew of good mechanics here." The work proved he was right. It was mechanically good, but, artistically, not so good. Neither could he see it when attention was called to the lack of gradation in the lighter tones and flatness in the shadows of a color reproduction set of positives then under way. The retoucher gets these positives, and by the time he has corrected the shortcomings of the mechanical photographic work with pencil and graphite, most of the character and feeling of the original are gone. Finally we have a first-class litho crayon drawing on the glass that is mechanically clean, but devoid of all reproductive character, from which a halftone screen negative is made; and the final job looks like a cross between a litho stone and a collection of halftone screen dots that makes the pressman perspire in zero weather.

The artist who made the original painting is our best critic. His trained color sense combined with a knowledge of light and shade makes him better qualified to point out the defects in our work than any one else. To sell him offset lithographs we must win his approval by a fairly good reproduction of his canvas, water-color, or pastel; the result will be repeat orders from satisfied customers and everybody happy, from president to printer's devil.

Scientific Layout of the Printing Plant

By CHARLES W. KELLOGG

DECIDED improvements in the printing and publishing business have developed the need of better housing facilities, with the result that beautiful and practical buildings devoted to the exclusive business of printing—both newspaper and commercial—have been erected in every part of the United States. This demand opened up a new field for our engineering department. The success of our engineers in assisting our clients with their problems for the past several years has created a demand for our services in aiding architects and builders in the planning of their buildings.

Under the old order of things we had to make the plant fit the building, but now in most instances we are brought into the picture in time to plan the arrangement to care for the business and provide for possible future growth, after which the architect and contractors construct the building to fit the requirements. Necessarily, a number of such types of buildings have been constructed for the exclusive use of printers, and through the close cooperation of the owners, the architect, the contractors, and this department, it has been made possible to have the buildings fairly perfect from an efficiency point of view.

It is more important at this time than ever before that we have some vision as to the future, and consider carefully what might reasonably be expected of these exclusively built buildings ten or twenty years hence. As the business grows problems of expansion will arise, and, therefore, every well arranged plant should consider the possible future requirements of the business that will result from such growth.

The Unit System

Future results can be fairly well assured with a proper plan based on the unit system as we apply it to equipments and layouts. Failure to follow a predetermined plan of this sort will eventually develop a very much disorganized plant in which it would be impossible to expect a continuous or a direct line of production. The plant layout that is not planned with the future in mind can not be expected to continue to operate under ideal conditions as to economy of production for any considerable length of time. A good layout should not only take care of present requirements, but should give careful consideration to future developments.



Charles W. Kellogg

Today production costs are a vital issue. The printing plant which is out of line on its costs must remove the trouble or pay the price in lost business. And particularly does this apply to the company which is erecting or leasing new quarters, for it possesses a golden opportunity to reduce costs to a minimum by straightening its line of production. Speaking on the subject of "Engineering as Applied to the Printing-Plant Layout," Charles W. Kellogg, of the American Type Founders Company, discussed the topic forcefully in a recent address before the Metropolitan Section of the American Society of Mechanical Engineers. Except for the omission of the opening paragraphs, his address is printed on this and the two following pages.

I could say much in detail about the unit system of composing-room equipments, but time will not permit. When we first took up the organized study of composing-room requirements we found that while the catalogs were full of pretty pictures of equipments of various sorts, yet none was designed with regard to what may be called "team work." No one had given any complete and consecutive thought to the efficiency of the equipments in relation to each other. There did not exist equipments for use in newspaper, book or commercial printing plants which would permit of a scientific routing of the work through the composing room.

Related Equipment

With this fact in mind we started the work of designing what has proved to be an entirely novel series of composing-room equipments, each a part of a system, which when properly placed resolves each commercial composing room into units of from five to eight

compositors, within reach of whom the usual materials needed for the group are concentrated. In some instances as many as four or five pieces of equipment made to hold related materials were concentrated into one item of equipment. It resulted in a big saving of space, elimination of unnecessary steps and searching for materials, and more comfort for the workers.

What is known as the "alley" in the printing plant has virtually been made a miniature composing room, so that as the business grows all that is necessary to do is to add one or more items of equipment to take care of the requirement. To double the capacity of the composing room does not mean doubling the equipment, so that in making the layout it is usually possible to make such an arrangement that any natural growth of a concern can be cared for without a rearrangement of the entire plant. This system practically puts the plant on a unit-expanding basis.

A sufficient number of new buildings have already been constructed to make it possible for us now to work out some sort of chart that will more clearly place before the architect and the contractor the requirements necessary or advisable in the construction of buildings for use in the printing business. We are now gathering data covering the more important of the printers' buildings erected during the past several years, and when completed we fully believe that a vast amount of valuable information can be gotten together that will be of great help to those contemplating building. In just what form this information can be made available is yet to be determined.

Many Old Buildings Used

It is not expected that all printing plants can be housed in new buildings erected especially for printing-plant requirements. We shall have to continue to fit many into the now existing structures, and this will always mean a more or less serious problem to solve, if these plants are to be made to produce at the lowest possible cost for each unit of labor used.

We make a distinction between what is commonly called "standard" equipment and "standardized" equipment. In the making of plant layouts for our clients we have found that the so-called "standard" equipments are inadequate, and therefore for several years past our engineers have found it neces-

sary to design much special equipment to fit the many branches of the business, and to give the customer the relief that is necessary in order to enable him to cut his costs of production.

About a year ago we started to make a critical study of all the equipments so designed with a view to "standardization." We have already held several extended sessions in which our leading engineers, from both the East and the West, have participated. This work will continue until we can give to the industry a plan for "standardization" of equipments that will benefit every branch of the business.

We are frequently called into consultation with the managements of large printing concerns to help them determine the advisability of building or leasing. Obviously, the main questions to be settled first are: Whether to build or lease; where to locate the plant; the type and construction of building best adapted to the purpose, and the layout of the plant.

The question of whether to build or to lease is usually raised by reason of one or more of the objectionable features in leasing. These usually are: High rental, limitation as to growth, inefficiency of operation, poor location, and the uncertainty of continued possession. No one of these points should be overlooked in the consideration of a new lease, for all are vital.

The Leasing Problem

In helping clients to decide as between the advisability of building or renting, it is most important to give thorough consideration to each phase of the proposition and make a careful comparison of the effect of both courses. In considering the leasing problem we are always limited by the number of buildings available for the purpose. Then there is the question of the labor market, transportation, accessibility of power, water supply for fire protection, rental, insurance, continuity of operation, and working conditions.

Most of the points given above will, of course, enter into the discussion of the question of a new building, and to these will be added such matters as the value of a permanent plant, ability to provide for additions and expansions, stability due to having assets in real estate, advertising value, pride of ownership, convertibility, and sales value.

The type of building for any business must necessarily be determined by its location. When we reach this point, it is then the proper time for the client to call into the conference his architect and possibly his contractor, if one has been selected. This is usually followed by the architect draw-

ing a set of tentative plans showing the floor areas. It is obvious that nothing further can, or should, be done with the plans and the construction until the entire layout of the plant is planned, otherwise it may result in a crowded arrangement or wasted space.

A Definite Example

There are exceptions, however, and we do not always follow this plan as a set rule. In the case of the new building for the New York *Evening Post*—one of the latest of the fine buildings constructed for newspaper work—we started our work from a survey of the ground selected for the building. We were given almost a free hand, and with the full coöperation of the management, the architect, and also the contractors we were able to prepare a mechanical arrangement that probably has no equal in the United States, and around which this beautiful building has been constructed.

To give a better idea of the value and the importance of this work, we have a complete drawing of the floor space of the composing room, a framed duplicate of which is now hanging on the wall of that room. As can be seen by the second plan, a shadow drawing of this layout was incorporated into the building plans of the contractors, over which they were able to make a complete and absolutely accurate detail drawing for the electrical installation. I will also add that in the matter of equipment for this floor our engineers were again given a free hand, with the result that the very best of our engineering skill has been embodied in the design and construction.

I want to state that, almost without exception, the New York newspaper plants are mechanically highly efficient. Their managements take a broad-minded view of the requirements of their plants and their wage earners, and they are never slow in authorizing any improvement that will tend to eliminate stagnant production.

The Engineer Needs the Facts

With one most important question—whether to build or to lease—out of the way, the engineer then starts the work of determining the floor space required. In doing this it is necessary for him fully to familiarize himself with each detail of the business of his client. This means that the management and heads of departments must fully coöperate with the engineer in supplying him with the necessary data on which he can base his conclusions for the new arrangement.

To the floor space required for each department should be added the extra

space needed later to accommodate the proper units for expansion. Failure to provide for this expansion in the beginning will retard the future growth of the plant.

The first step in making an equipment layout is to draft what we term a "flow sheet," which is based upon the analysis of all of the manufacturing processes. The result of this study is then indicated on a diagram something like an organization chart.

It is not, however, advisable for the engineer always to follow the plan indicated on his "flow sheet"—especially in the case of rented floor space. Instances will arise where it will prove advisable to make a sacrifice in some department where the gain will be greater in another. But, once the engineer has fully established the correctness of his "flow sheet" data, his aim should be to adhere to these data as closely as possible. There are bound to be some cross-currents in the best of layouts, because of the fact that the majority of printing concerns do what is termed a general line of work. We find, however, that if the information contained in the "flow sheet" is followed closely, the chances are that "back-tracking" will be reduced to the minimum and the plant will operate on a far more productive basis.

The Equipment Schedule

An equipment schedule is then prepared, after which the actual work of determining the floor space is started. The equipment schedule should show the actual dimensions—width, depth, and height of each machine or piece of equipment; the floor space required, which will include the actual working space properly to operate the item; its condition; whom it is used by; what it is used for; its place of location, and its disposition for the future.

To illustrate what is meant by the floor space required for each item, let us take a 10 by 15 inch platen press, the all-over dimensions of which are 47 by 55 inches, or approximately 18 square feet. On the width, 18 inches should be allowed to permit the pressman to make ready forms and pass between the machines. On the depth, 18 inches should be allowed at the rear, so that the operator can not be caught between the machine and a guard or wall, and about the same space in front to feed the press, giving a space 5 feet 5 inches by 7 feet 7 inches, or approximately 41 square feet.

On the various machines or cabinets, this "free" space will be more or less, according to the requirements. By following this plan through the list, the actual floor space is soon determined.

To the floor space actually needed by each department is then added the space required to accommodate the proper units for expansion. Space for main communicating aisles must then be added, and this feature should be carefully computed. Careful consideration should be given to space for incoming and outgoing materials.

Engineer's Vision Important

It is at this point that the closest co-operation should be exercised between the management and the engineer. At this particular point the engineer with his trained vision is of great importance, for he should be able to draw from the executives a definite idea of the concern's future sales program and prospects. In the discussions that will follow, the trained engineer will be in a fair position to outline what might fairly well be expected of the plant in its future operations, and then he proceeds to plan the actual layout.

The proper planning of a plant of any kind is of major importance, for it is impossible to estimate the waste of time, energy, and money due to mistakes made in planning the average plant. Vital mistakes in planning impose a tax on the product for all time.

The layout of a plant is determined by the flow of work through the plant, that is, the movement of materials from one process to another. It is necessary, therefore, for the engineer to know the volume of the various kinds of work and the sequence of processes through which the various classes of work have to pass.

The problem of plant layout for a new building is to arrange and locate the walls, stairways, columns, elevators, machines, equipment, and other items which must have fixed locations, so that the route traversed by the materials will be as short as possible and the progress rapid and smooth. The rearranging of an existing plant, or the plant layout for leased floor space, is practically the same, except that it is limited by the fact that the former items are already fixed.

Analyzing Processes

Before planning a layout it is important for the engineer to examine carefully the process through which the materials pass, and the machines and equipment to be used, in order that the product may be turned out at the lowest cost consistent with the quality desired. This requires the ability to analyze the processes and focus on them the latest scientific development. To do this successfully, it is essential that the engineer have a knowledge of the methods used in similar plants and of

the improved machinery and equipment on the market.

Due to their major importance, the need for specific application to a problem, and a guarantee of results, the topics of heat, ventilation, and illumination are best left in the hands of expert engineers in these lines. In the past we have found a wide difference of opinion concerning these subjects. However, of late there has been a better understanding of the value of the proper application of air conditioning and illumination to the printing industry. Several large electrical companies now maintain departments offering sound advice on this subject.

In closing I want to say that now, more than ever before, engineering ability will play a highly important part in the success of any large corporation. This fact is being looked upon with ever-increasing favor by the executive with vision. In the production of printing, modern methods have advanced to a point where the properly arranged plant forms an important item in saving costs of production. The aim has been and is to make our engineering department an institution dispensing expert advice on all matters pertaining to engineering as applied to printing-plant production of the most effective character.

Are Mergers Profitable?

By ROGER WOOD

GOOD morning! Have you been stung with the "merger bug" yet? In nearly every one of the twenty-five so-called "printing centers" in the United States there are mighty few large printing plants whose owners have not been approached or have not seriously considered merging with one or more other printing, lithographing, or engraving establishments.

Just as there are cycles of business expansion as well as business depression, so there are cycles of reorganization and of refinancing.

Periods of Expansion

During the past forty years, industrial and also commercial business has passed through three periods of expansion. These periods were notable in the consolidation of business firms and institutions under unit control and collective ownership. Strangely enough, each cycle of mergers seems to have been actuated by a different motive.

The first cycle, which began in the late eighties and lasted five years, was a period of mergers or consolidations whose motive or purpose was monopoly. These mergers were called trusts, and were fostered to dominate the various industries which they served. It was this period of organization and financing that was the cause of the enactment of the Sherman Anti-Trust Law.

Naturally, such mergers required high financing, the marketing of stocks and bonds to furnish enough capital to take over the various units or factories and to absorb the "watered stock." Because of this intensive promotional work the ones who profited most were the brokers and the profes-

sional promoters, as well as a few of the owners of controlling interest in the businesses affected by the mergers — the few who insisted on a cash settlement rather than stock in payment for their interest.

Seeking Unit Control

In the late nineties, commercial business again felt the need of "combines" or mergers. This time the motive was the control of production or at least the reduction of the cost of production by unit control.

During this period, and for the three or four years following, new methods of financing were developed — methods that seemed to be adequate to the needs of business at that time.

Even greater capital was required for these mergers, and again the professional promoter and the stock broker were the ones to take the profits; not earned profits, but commissions paid for "professional" services.

Beginning about 1911 the chain-store idea was developed and has since flourished. There were a few industrial combines as well during this period, but the motive of both was "marketing." Although some "wild-cat" financing was done in connection with some of these enterprises, in the main the financial structure was freer from the high finance that had marked the two preceding cycles.

Thus we see that industrial mergers have gone through the three stages: Monopoly, production, and marketing. Each of the first two was followed by periods of depression which were attributed to various economic causes. In a very large measure these depression

periods were created because of the influence of the wrong motive back of the expansion. Where the motive has been marketing, the industries affected by mergers have not suffered but, on the contrary, have prospered. Much of the prevalent national prosperity, in fact, can be directly credited to these marketing mergers.

During this period of forty years, the printing industry has grown slowly but steadily. It has been heir to all the vicissitudes that have beset other industries and perhaps a few extra, due to the invention and development of new processes of production.

However, because of small shops and individual ownership, we have not been confronted with numerous mergers, at least no mergers of serious importance to the industry at large. The reason for this is that during the first cycle the printing plants did not offer a good field for exploitation and the development of mergers; individual plants did not represent large capital investment, and the industry did not present a chance for profitable monopoly.

Recent Rumors

During the past year or two there have been many rumors of proposed combines of printing establishments. Strangely enough, these mergers have not in the main been fostered by professional promoters or stock and bond houses. Such activities have been planned mostly by men in the industry, and the motive has been economical production.

Economical production is the second stage on the cyclical chart of combines and mergers. In other words, the mergers proposed for various printing groups have for their purpose motives which were out of date ten years ago in other industries and which were not practical for most industries.

Whether or not economies of production will be effected by unit control made possible by mergers remains to be seen. It is an unsolved problem as far as our industry is concerned.

Cost Systems

Not so many years ago adequate cost systems were almost unknown in printing establishments. In this, and in the marketing end, the printing industry has lagged behind the trend of progress in other major industries, and the printing industry is therefore not qualified to follow the basic trends of other industries. It will not be until it develops a higher type of executive personnel on the marketing end.

Economical production can only be effected by proper engineering and the disposal of obsolete equipment, and can

not be effected by merging two or more plants, each equipped to do the same class of work but both improperly designed from an engineering point of view and with the burden of a large capital investment in machinery that is not keyed up to the new American tempo of production and cost.

Methods of financing have undergone many changes during the past quarter of a century, but more particularly during the past two years. Obsolete methods will not serve any more than will obsolete machinery.

In contemplating the merger of a printing plant, the individuals whose ownership holdings will be affected should consider:

Questions Affecting Mergers

1. What class of work will the plants specialize in and what is their market? Without knowing your market, no business can hope to succeed.

2. Will the merger mean a more efficient selling organization? If it does not, then do not merge—for more effective selling is the only justification for a merger of printing plants.

3. Does the financing plan cover a period of at least four years during which the new business will be developed to absorb new capital every eight months, or for five financial periods of expansion? It is easy enough to raise a definite sum of money, all things being equal, but the only safe way is to arrange for new capital as the business can absorb it, just as anticipated earnings are apportioned to retire a bond issue or take up notes.

4. Has the depreciation allowance for the next ten-year period been

placed high enough or is it sufficiently flexible to allow adjustment for installing new methods of production that may be discovered or invented during such a period? Just as new methods and efficiency of production have been developed in the past ten years, so will new and even more important developments take place in the next decade.

5. What provision has been made to train and develop a sales organization that will be efficient and adequate for the five periods of financial expansion during the first four years?

6. Has adequate provision been made for an advertising budget and program over the four-year period so that it will coordinate with the growth and development of the sales organization during this period, and does this advertising program synchronize with the five periods of financial expansion?

Advertising, like salesmanship, has been sadly neglected in the printing industry. Advertising is a necessary part of selling in all major industries, especially in the printing industry. If it is a practical plan to expand the sales department of a printing group every eight months, it is both practical and logical that the advertising program should be planned on this same basis. Advertising must precede sales effort; therefore, by apportioning the advertising program to five periods of eight months each and by inaugurating each step or campaign of the program eight months in advance of the next period of sales activity, the advertising activity will be properly coordinated with the sales effort of each period and will carry its share of the work.



GILSON AND HIS
ASSISTANTS READ
THE FIRST PROOF

"Art, when it is really understood, is the province of every human being. It is simply a conception of doing things, anything, well. When the artist is alive in any person, whatever his kind of work may be, he becomes an inventor, a searching, daring, self-expressive creature. He disturbs, enlightens, and he opens eyes for better understanding. Where those who are not artists are trying to close the book, he opens it, shows there are still more pages possible. He does not have to be a painter or a sculptor to be an artist. He can work in any medium. Museums of art will not make a country an art country, but where there is the art spirit there will be precious things to fill museums." —Robert Henri, N.Y. With this premise we present to you a new organization of expert typographers in Detroit. This Guild is the realization of a group of men experienced in all details of typesetting. They believe in the great possibilities of fine typography and the important part it plays in making a piece of printed matter outstanding or ordinary. Rare, indeed, are those possessed of a special intuition for the manifestations of the artistic spirit and full of deep and passionate interest in all matters pertaining to it. You get the benefit of such men in this Guild. Equipped with new material and machinery, new domestic and foreign types, we are ever ready to demonstrate to you the First Proof of our ability to serve you well.

Real originality; type part of announcement set in form of the picture.
By the Graphic Arts Guild, Detroit

EDITORIAL

By J. L. FRAZIER, Editor

The Postal Situation

Bills to reduce postal rates passed both legislative bodies at Washington during the past month. The house passed the Griest bill on April 9th and the senate approved McKellar's on the 18th.

It isn't a question of paying your money and taking your choice; what will come out of the conference committee will be neither Griest nor McKellar. Then this composite bill must pass both houses and after that be signed by the president.

To a considerable number engaged in the printing business the better of the bills is none too good. Since, in conference, there must be give and take, these members of the industry are not particularly concerned whether or not such a compromise bill passes at this session of congress.

The Griest bill restores the one-cent mailing card, offers new services in respect to part paid matter, gives printers the advantage of a pound rate on third-class matter, reduces charges on some of the parcel post zones, restores newspaper rates to those prevailing in 1921, and directs the postmaster general to take credit for the free services that have heretofore been charged against all who pay postage.

Upon the passage of the Griest bill, J. Horace McFarland, representing the typothetae's legislative committee, urged printers to influence Senator McKellar, either direct or through their own senators, to introduce the house bill in the senate rather than push his own.

This senate bill not only restores the one-cent post card, but puts third class at the old rate of two ounces for one cent. (Under the Griest bill less than one and one-half ounces may be sent for one cent at the bulk rate of twelve cents a pound.) Furthermore, newspapers are put back to the lower 1920 rates in the senate's measure.

It happens that in the main essentials this is the bill President Coolidge vetoed when postal salaries were increased. He is reported as taking the same position he held last year and, it is said, will sign no bill that is likely to create a deficit.

In his efforts favoring the Griest bill, Mr. McFarland has been actuated by the desire to get the best bill through that the president would sign.

However, McKellar's bill was passed and a conference committee will blend the two. With flood relief and election commanding so much attention from our lawmakers, and the president unlikely to sign anything more acceptable than the Griest bill, it is probable that postal reduction must wait.

It is possible, too, that if it does wait a better bill will result. Printers doing a considerable volume of direct-mail advertising are more vitally concerned with postal rates than general printers, and, strange though it may seem, the Griest bill is not at all acceptable to leaders in this class. They are for the old rate of two ounces of third class for a cent, think it is no more than fair, feel that it will mean a lot of the nation's business and are inclined to wait — and fight — till they get it. They feel, furthermore, that to accept half a slice now will indefinitely postpone their getting the whole loaf.

This, then, is a cross section view of how the printing industry looks upon postal legislation at the present time. Vote your own ticket.

This Scarcely Seems Right

Southern Ohio printers are concerned over a report that the Methodist Book Concern, which has heretofore done work only for the church, will hereafter compete with them.

Assured of continuous operation regardless, we must assume, of operating profits, the entrance of the concern in the competitive field quite naturally troubles printers who stand on their own legs.

Most printers will shade their prices at times, even though they shouldn't. But when the average printer reduces his prices to fill up a valley in his production he knows it can't be an every-day matter. The fear of the Ohio printers is due to the fact that in the case of the Methodist Book Concern it can be. Such an organization doesn't have to make a profit — or break even.

If those responsible for the conduct of this big plant can not be induced to give up the idea, we believe they will be ethical in pricing their work and prove to be clean competition.

We feel, however, that it is only right that printing orders should go to printers — not churches, schools, and penitentiaries.

The Cause of Workups and Their Remedy

By GEORGE WAGENLANDER

THE following is the result of quite a few years' study of workups and their cause. I will not go into causes familiar to all, such as poor justification or spongy material and warped furniture, but confine myself to explanation of instances where material is good and so-called unexplainable workups are discovered. The pressman has blamed the workmanship of the compositor, and the compositor has blamed it on incompetency of the pressman. Both are wrong.

I will employ a few "whys" which pressmen everywhere will recognize, and then spring my little joke, which happens to be not a joke but a brutal fact—the great-grandfather of all the workups on the flat-bed press.

Why Is It?—

Why is it that the material of a form will work up on one press and the very same form will make little or no trouble on another? Why is it that the furniture, slugs, and rules working up will make little or no trouble if the form is worked the other way? Why is it that there will be five workups on an old press to one on a new press of the same size and make?

There is only one answer to these questions: The bed dishes on the impression line. Sounds absurd, doesn't it? Let us pause and reflect a moment. Many new presses have been erected with a perfectly flat bed showing a sheet or more low in the center, caused by one or both center tracks being low. It is evident that the bed dished, else your impression would not have shown up the low tracks. Why, then, should it not dish the other way?

I will prove that it does dish, that this dishing is the cause of the unexplainable workups, and will show how this may be overcome.

Taking any present-day make of press and locking on a one-page type form, we will say that it takes exactly five sheets to print. Now, locking on a sixteen-page form of the same type including heavy halftones, when ready to print we find that the type page coming on the impression line with the halftones now carries seven sheets. This proves beyond any question that the press has given.

It is only natural that from one-quarter to one-half of the total amount of give should take place under the bed, due to the give of the girder on the impression line. This being true, what right would I have to assume that

the bed which is too weak to support the impression, if one of the tracks is low, should be strong enough to push down all the trackage the full size of the bed the same amount as the give on the impression line?

In face of the facts set forth it would be ridiculous to make such an assertion. What, then, are we confronted with? A dishing of the bed, with a consequent repeating wave-like flexing of the form on the press.

The bed not being strong enough to distribute the required printing pressure over the entire bed area and trackage, the wear of the tracks becomes greater on the impression line, with a consequent greater concave arc of bed dishing and workup tendency as the press becomes older. With this bed concavity traveling wave-like along the bed as it proceeds to the end of the impression stroke, rules, slugs, and furniture straddle the wave and at each succeeding impression come higher; whereas, if the form is worked the other way, these materials will go down in the trough of the wave.

The bed on the old four-track crank-movement Huber press more nearly approaches the ideal than others of present-day make. It, too, gives, but not so much as do the others.

In working wood-mounted cuts the pressman will notice that the nails extending from gripper-line to ink table loosen and work up so that they may be pulled out with the fingers, the nail in about the center of the block being the first one up. The cylinder having traversed, we will say, half the cut, the block dishes with the bed, compressing the wood against the wedge-shaped point and sides of the nail; in from fifty to two hundred impressions this action has forced up the nail and made the hole too large for the nail. You will conserve time by taking it out and throwing it away, because each time you drive it down you will find it looser and quicker to come up and be the cause of more wasted time.

Here is the remedy which will practically kill the workup demon. Run the empty bed to a position about half the impression stroke, with the cylinder up off the bearers and nothing resting on the ink table. Any attachments giving a downward pressure to the bed should be loosened so that the bed rests perfectly free on the carriage.

Now feel of the carriage roller that is under the bed directly on the impression line. If loose, measure by in-

serting shim-brass or ribbon-steel; check this up on a sheet of paper. If the press is new, trying one track will suffice for the four.

If the press is an old one and you find it difficult to measure up each track separately, you may judge by a flat impression pulled with a heavy all-type form. For example, you have checked up the looseness of the carriage roller of one of the two center tracks and find it loose one folio; your impression shows that the two outer tracks are a folio low.

Your check-up sheet from right to left would read: Track 1, two folios; track 2, one folio; track 3, one folio; track 4, two folios. Supposing the impression would show a sheet or two folios low in the center, while the impression is correct on the outer tracks. The roller measures a folio loose and the impression girder dishes a folio in the center. In this instance your check-up sheet would read: Track 1, one folio; track 2, two folios; track 3, two folios; track 4, one folio.

This check-up represents concave wear of the tracks, dishing, and permanent give of the impression girder with the press empty. To this must be added the approximate give of the impression girder when the cylinder is on the bearers printing heavy work. To determine this, divide the difference of tympan it requires to print the single type page and the same page locked in a heavy form. Use from one-quarter to one-half of the difference, according to the sturdiness or weakness of the girder construction.

Careful Underlaying Is Important

You are now ready to underlay the tracks; use shim-brass, tin, or ribbon-steel for this purpose. Do not loosen the extreme ends of the tracks, else you will balk the objective. It would be a good idea to go over them and see that they are tight. Loosen the track-bolts or cap-screws on and near the impression line and underlay in accordance with the check-up sheet. Do not underlay anything else but support on the impression girder.

When finished your tracks will present an upward bulge of from two to four thousandths of an inch on the impression line. Even if you should overcalculate one or two points, that is, underlay one or two thousandths too much, it will do no harm, because there is no pressure on either side of the impression line to push down the bed and make it convex. Reset the cylinder to exactly the same amount of tympan as it carried before when a heavy form was being run through.

You can readily see that where before the give of the girder under printing strain presented a concavity of the trackage, now, if your calculations have been correct, the track and bed will be flat when the girder gives with the press in action, thus doing away with bed-dishing and workup.

If bed-movement drive bearings are attached to tracks and press should turn hard, insert half the amount of shim that you used in underlaying that particular track. The reason is that if it is so snug as to bind upward now, it must have bound on the impression stroke before, since the give of the girder and the trackage in its vicinity would develop a downward misalignment, as you can readily see.

Presses having very weak beds, and carriage rollers widely spaced, may present a dishing possibility between rollers. With this, however, nothing can be done to improve things.

Bed convexing and concaving under impression, from bearer to bearer, caused by low outer tracks and low inner tracks, is visible by flat impression, whereas concavity from gripper to ink table is not visible.

All these conditions produce form flexing with resultant workup. The reason workup tendency is greater from gripper to ink table is because the concavity travels wave-like, ever shifting its greatest point of depth as the bed proceeds; whereas, in concavity or convexity extending from bearer to bearer, the bed and form assume that position at the beginning and remain so until the completion of the impression stroke.

Practically all presses wear the outer tracks more than the inner ones. This can be explained by the fact that the cylinder is set for the average heavy work. So long as heavy work is run, the wear is even on the impression line; but every time light forms are worked the inner tracks receive only the wear equivalent to the amount of pressure required by that form, while the outer ones receive the full pressure at which the cylinder is set to the bearers. Thus after years of running all kinds of work the outer tracks will gradually show weak impression. Here again we have evidence that press-beds are not massive enough to distribute the required pressure over the entire bed area and trackage.

Taking a board twelve inches square, one-half inch thick, lay it on a flat sandpaper table. Place on the center of it a twenty-pound weight, four inches square, and move the weight back and forth, imitating bed action, for a half hour. Upon measuring the

bottom of the board you will find it concave or dished. If you take a board the same size square but three inches thick and repeat the operation, upon measuring you will find it flat, because it was massive enough to distribute the pressure of the weight over the entire area of the board. Modern press-beds are relatively the same as the one-half-inch board in their actions. I have seen massive-bed Hubers with the outer tracks worn lower.

One of the worst workup propositions is caused by the practice of using linotype and monotype in the same form. This produces hours upon hours of lost time in the pressroom annually. Monotype must be locked very tightly; on the other hand, linotype must be locked very loosely. Usually the head-

ing is a linotype slug while the body of the page is monotype. This necessitates narrow carding of the entire form and even this is futile in many instances where the lino. slug runs from gripper to ink table. If the press is fixed so that the bed stops dishing and you use either all monotype or all linotype in the form makeup, you can throw your narrow cards away—they'll get dusty for lack of use.

In conclusion I will say that press manufacturers could greatly improve the situation either by making more massive beds or by weakening track support at the ends so that the give would be uniform. However, the printer is more vitally interested in the presses running in his pressroom than in future possibilities.

What Is Your Time Worth?

By HARRISON B. WILLIAMS

MANY printers throughout the United States are endeavoring to make a little more profit from their efforts. Usually these endeavors are concerned with reducing costs or increasing output. Occasionally, but rarely, you find a man who has the right slant on what is keeping him back. It is pretty apt to be time; not a lack of time but a proper use of it. Did you ever say, "I ought to call on Bill Joyce and see if he doesn't need some catalogs this fall, but I've got a hundred things to clear up around the shop first"? Then the first thing you knew, it was five o'clock. It happens pretty often in printing offices whether they be in Iowa or Massachusetts. What is the practical remedy?

Budgets seem to be a pretty good thing for saving dollars; why can't they be just as useful for saving time? They can. Let us take an actual case. A printer has two moderately busy job presses and one hand compositor doing approximately two-thirds of the work he could do if the orders were on hand to be filled. The boss makes about five thousand dollars a year, which means about two dollars an hour. He is a likable fellow with genuine personality, neat appearance, and a thorough understanding of his trade. Instead of using his wide acquaintanceship and knowledge of printing as a means of securing more business, he is constantly busy correcting proofs, cutting paper, or doing any of the score of odd jobs that are always plentiful in a printing plant. I have actually seen him spend an hour talking over a six-dollar Christ-

mas card order. At the rate of two dollars an hour for time, is it worth while? Most of the jobs he does around his office could be done by a boy or girl at the rate of twelve dollars a week. This small additional expense would leave him free to solicit business most of the day, and I venture to say it would increase his earnings twenty-five to fifty per cent. I would be willing to say further that he could soon build up a volume that would justify more presses.

The solution is not difficult except at the outset. If he and the other printers who "do not have time" would take an hour some evening with pencil and paper and think, the rest would be easy. Start in by figuring how much time you really are needed in the plant for various tasks. It is up to you to route the orders through the shop, to decide which jobs go to each man and the probable time required before he can start the next. How long will it take you to clean up your correspondence, order paper, get the girl busy on statements, and attend to the absolutely necessary things? Remember, absolutely necessary signifies management. Let some one else make out statements; if you do it yourself it is not a wise use of time. Perhaps you will decide that you must plan on being on hand for an hour and a half the first thing in the morning and for a half hour around lunch time. That ought to be ample for the average shop. That leaves six hours for you to call on old customers and prospects. Try it for a month and see if it doesn't mean the brightest summer you have had yet.



Effective Lighting Installation in Fresno Newspaper's Plant

By CHARLES W. GEIGER

DURING the past several years all illumination engineers have made a very extensive investigation of the lighting requirements of printing offices in connection with studies of other similar manufactories. These investigations have resulted in the development of special reflectors and shades designed to give adequate light free from confusing shadows and glare. Many printing plants have installed these lighting fixtures with very gratifying results in increased output of higher quality and improved working comfort for the employees.

Among recent notable lighting installations in California is that just completed in the plant of the Republican Job Printery, in Fresno. This plant is one of the most complete printing establishments between San Francisco and Los Angeles, occupying a factory building 80 by 135 feet, and housing composing-room equipment with a battery of linotypes, a pressroom of three automatic job presses and three large Miehle cylinder presses, two mammoth power cutting machines and complete bindery equipment, including two folding machines, ruling machine, and finishing department.

General and Local Lighting Employed

To provide adequate lighting for this plant a general and a local lighting system are used. The general system consists of ten large RLM reflectors

equipped with powerful 200-watt lamps. These are mounted quite high; in fact, sixteen feet from the floor level.

The local system recently installed consists of thirteen units fitted with 150-watt lamps, 6 feet 6 inches from the floor, placed at convenient points over type cases and imposing stones. Ten units fitted out with strong 150-

watt lamps and bonnet-shaped reflectors are mounted on pipe fittings extending from the wall and provide light in proper intensity for job presses and a makeup bank. Lamps and reflectors of this type are also installed over paper cutters, where close work is required, and also over the beds of the cylinder presses, thereby providing an abundance of light for the convenience of the men working on forms.

Wires Protected by Conduit

A convenient outlet is also installed just over the bed of each press to which a lamp with an extension cord can be attached for cleaning, oiling, or making repairs under presses. All circuits on the presses and overhead are in conduit and each local light is equipped with a pull chain providing convenient switches for cutting the light on or off. Electric current is supplied by the San Joaquin Light and Power Company.

The first picture shows the composing room under general lighting only. Note the heavy shadows near the floor. This room lacks sufficient light for close work in printing. The second cut shows the composing room under local lighting only. An abundance of good light is provided near the work as illustrated by comparison with the cut at the left. All of these photographs, which were supplied through the courtesy of the San Joaquin Light and Power Company, received the same exposure. The comparison is in accord with the facts.



MACHINE COMPOSITION

By E. M. KEATING

The experiences of composing-machine operators, machinists, and users are solicited with the object of the widest possible dissemination of knowledge concerning the best methods of obtaining results. Replies to inquiries will be made by mail when accompanied by return postage.

Oiling the Machine

What parts of a Model 8 require oiling beneath the lower magazine and around the distributor clutch? I have not been instructed in this work, although I know where every oil hole is on a Model 5 machine, etc.

To see the oiling places you may not have found in your search, turn the crank handle until the magazines reach full height. Place your lamp in a convenient position under the magazine frame. Move the locating bars singly and put a drop of oil in the front and back blocks in each bar. Put one drop on the roll on each bar, also. These rolls are operated by levers attached to the horizontal shaft, which has an oil hole leading to each bearing. Use one drop. Near the front you will observe the guard which operates in a guide on each side; use one drop on each side where the bar slides in its bearing. Change the lamp to the back of the machine and observe the places marked "oil"; remove each screw and put several drops in each hole. The screw crank and its shaft have bearings; use a drop in each oil hole. Throw off the distributor belt and turn the clutch shaft knob; you will find a small hole in the flange which should receive one drop of distributor oil. Wipe off any overflow. While oiling, apply one drop to the contact bevels of the right and left stops, as these parts (in pairs) are subject to frictional contact. Wipe off any surplus. The oil cup on the bracket supporting the outer bearing of the flange has been discontinued, and an oil hole in the bracket takes its place; one drop of distributor oil at this place. Each of the three distributor screws has two bearings, one on each end of the screw. Place but one drop of oil at this point, and again wipe off the surplus. The day following the oiling of the screw bearings it is a good plan to take a narrow strip of cloth and, applying gasoline to it, hold the cloth in the groove next to the screws as they rotate. This method will remove the surplus oil which has run out of the bearings. Many operators apply a gasoline-soaked strip of cloth to the groove of the rotating screw, and as it travels they

shift the cloth, which absorbs the oil and picks up any attached dust which, if allowed to remain in the thread of the screw, would eventually be transferred to the lugs of the matrices and cause trouble. Keep the distributor screws free of excess oil and do not handle the matrices with dirty or oily fingers. This will insure clean lugs on matrices. A Denver machinist on a daily paper, pointing to a certain small ad. machine, stated: "The matrices on that machine have not been cleaned in eighteen months. Machine errors are scarcely ever seen in the proofs." On being asked what the secret was, he stated that he oiled the distributor screws himself once every other week, and that the path of the matrices was always free of oil. Examination of the distributor screws proved the truth of the statement; the screws were bright, and adjacent to the bearings the V-shaped grooves were free from oil. Operators on machines carrying light matrices, such as five, five and one-half, and six point bodies, should remember that excess oil spreading out on screw threads will eventually reach the lugs of the matrices.

Should Have a Thermometer

How can I tell whether the metal temperature of my electric pot is correct? I have seen the "boss" place a folded strip of paper in the metal and draw it out quickly. He then examined the end which entered the metal. Is this method accurate enough to get by with? I have worked in shops where the machinist kept his own thermometer in his tool kit, and we never had metal troubles like I am having now. I suggested to the "boss" that he ought to have a thermometer, but he can't see it that way. What can I do to keep my metal always at the right temperature?

If your electric pot dynamic control was set right once you would not need to bother with it, nor to test your temperature with strips of paper. A thermometer is a good investment, and with care it will last for years. Almost every one owning a machine also owns a micrometer. This instrument is needed to verify the adjustments of the trimming knives. Every shop should have a good thermometer as well as a micrometer, as they prevent guessing when adjustments are being made. It

is a very slow process to adjust metal temperatures without a thermometer, once the adjustment has been altered. By turning the adjusting screw one-fourth turn every half hour and watching the slugs, you probably will arrive at the proper condition of the slugs. Try it out and see.

Polishing of Molds

A correspondent writes in effect: "In a recent article in the Machine Composition department you recommend the use of silver polish to keep the molds clean. Will you be kind enough to furnish the name of this polish?"

Our recommendation of silver polish was general in nature and for the purpose of cleaning a foul mold. Silver polish or any other kind of polish used on the inside of a mold will not keep it clean. The occasional use of any good silver or mold polish will remove the unavoidable effects produced by the hot metal coming in contact with the highly polished surface of mold cap and body. The intention desired was to develop the use of a non-scratching polish that would brighten the inner surface of the mold without cutting the metal surface. The non-acid silver polishes are usually made of finely divided whiting to which is added a very small amount of jeweler's rouge, which accounts for the pinkish cast. Ammoniated water may be added to form a paste-like compound of the consistency of cream. A few drops of this mixture rubbed on the body and mold cap with the end of a reglet will suffice to give the inside surface of the mold a bright finish. Before attempting any polishing the surface referred to should be scraped with a sharp piece of brass rule to remove attached particles of metal which are generally found where the inner edges of liners join with the body of molten metal. Avoid rubbing corners of mold cap or body, as these must always retain sharp corners. It will not be necessary to treat either the front or the back of the mold with the polish, as these surfaces are amply taken care of by the felt wipers—provided that you see that the surfaces do not become glazed. When the felt becomes glazed,

it no longer cleans the surface of the mold, and the result is well known; metal builds up on both the front and back surfaces of the mold, which leads to "high slugs." If the mold wipers receive proper attention daily, they will prevent adherence of metal on front and back surfaces, which will insure "type high" slugs.

Sunken Face on Slugs

An operator submits slugs showing depressed faces on words and characters. These words and letters appear sharp enough to print clearly, but owing to the sinking of the faces they could not print legibly. By breaking the slug through the sunken word a cavity, or air hole, was revealed, which gave a clue to the cause. Numerous other air bells appeared adjacent to the sunken face, and as this condition was prevalent on all of the slugs it showed with reasonable certainty that the plunger was not forcing the metal into the mold in sufficient volume to expel all of the air. An examination of sprue to determine depth of cross-vent or outlet for air should be made. Temperature of the metal should be determined. Aim to maintain the temperature at approximately 550 degrees F. Keep metal at or nearly at one-half inch from the top of the crucible all the time.

Remove the plunger from the pot well, take the hooked end of the pot mouth wiper and insert into the well; clean the holes found on the sides of the well below the surface of the metal. These holes are about three-sixteenths inch in diameter and about one inch below the top of the well. This operation of cleaning should be done weekly. Next you should insert the pot well brush, and in cleaning turn the crank to the right. The web of fine wire will clean the inside of the well. Clean plunger with the wire brush. This operation should be performed out of doors, as the dust dislodged is very poisonous. When the plunger is clean, apply graphite with a fiber brush. This operation lubricates the surface of it, and is especially desirable if the plunger is new. If you have had no new plunger in the past three years and are still using the one first supplied, you should order a new one. The number is F-4079. This plunger has an adjustable bushing which regulates the compression by permitting the excess metal to flow upward through the opening in the center. This opening may be enlarged or diminished by moving the bushing. It is held in place by a lock nut. It may be necessary to increase the stress of the pump lever spring either by moving the upper end forward on the notched lever, or, in

event that it is forward full distance, to lower the spring adjusting hook B-316, which is attached to the inside of the column. The effect of cleaning the plunger and well and increasing (if necessary) the stress of the pump spring is to give increased force to the plunger in driving the metal into the mold. This, however, is not effective unless the jets in the mouthpiece are open, and are kept open by probing daily with a stubby piece of stiff wire. You should explore each jet and see if the opening is clear for the metal. Also you should each day clean the cross-vents between the jets with a pointed instrument. You should secure relief from your trouble by following the foregoing instructions in part or whole as occasion demands.

Putting Rosin on the Clutch Buffers Is Bad Business

I am working in a shop and I find occasionally that the clutch slips; by pressing on the end of the clutch rod the clutch pulls the cams over. I formerly worked in a shop in which a similar trouble arose, and to overcome the difficulty the foreman sprinkled powdered rosin on the inner surface of the clutch pulley, and that did the trick. I have been wondering if this would not be a solution for my present trouble.

We suggest that you omit the powdered rosin from the list of remedies for slipping clutch buffers. Remove the clutch arm and examine all of the flat-headed brass screws. If any appear bright and show that they were rubbing on the surface of the pulley, try tightening them so that they are below the surface of the buffers. While the clutch arm is off the shaft, remove the bushing holding the clutch spring to the clutch rod, take out the spring and measure its length, then stretch it so as to show an increase of about one inch. Apply the spring and turn up the bushing that holds it in place on the clutch rod. If this bushing has another one threaded through it, this one may be turned out so its inner end is flush, as it may be used later to effect an increase in the stress of the clutch spring. If, however, you find but one bushing, turn it up about half way, and if the spring should lose its strength it may later be turned up full distance. Generally the increasing of the stress of the clutch spring is effective in overcoming the trouble you have described. It sometimes happens that the buffers are worn down from cleaning, or compressed from long use, and it becomes necessary to adjust them by packing underlays of paper beneath. While this is effective, it is often overdone, and in some instances the buffers are built up with paper when it was only necessary to increase the stress of the spring, as just described. Instead of building up the buffers, order new ones

and apply them. To keep a clutch in good working order, clean it regularly; do not allow oil or grease to run down the spokes and get on the inside surface of the pulley. Watch carefully and make certain that the overflow of oil from the outer end of the motor does not drip on the end of the clutch rod. Finally, do not use rosin on the clutch under any circumstances. The real cause for the slipping of the clutch should be determined and the remedy applied there.

Letter Next to Spaceband Does Not Align Properly

Some time ago I read your reply to a query where a character next to the wedge of the spaceband did not align with its neighbor. I have forgotten the cause and the remedy, and as this trouble is now present on some of my proofs I want to know what to do.

Go over your proofs and find the characters which show imperfect alignment. Remove all such characters and examine the lower lugs for defects. Remove all characters showing damaged lugs — it does not matter whether they are sheared on back or front — throw them away, and order new sorts. The shearing of the lugs is almost always due to neglect of the operator. He may not know it, but if he is careful with his lines and will not send away any line which causes the star wheel to hesitate or stop, it will prevent damage to the end characters. An operator may be judged by the condition of his hyphen channel. If he keeps the full quota of hyphens undamaged for as long as a week, he may be considered a careful operator. If he doesn't, of course, he may be called careless.

"You're Too High"

When a buyer shoots that one — take it seriously, even if it was not intended for that. It does not mean conclusively that the job in question is going for a figure lower than yours. Nine times out of ten you are out of the picture for a reason that is hard to place one's finger on. Nevertheless, when a buyer uses the well worn postmortem, "You're too high," it is well to check up on your selling methods, your production facilities, the real service you are selling. If you conclude some one is cutting the price, and you in turn cut yours, you are committing suicide. We deplore the practice of some buyers who make the unsuccessful bidders feel that lowness of price got the job, when the real reason is otherwise. Don't get ruffled. Have faith in your own abilities. Have faith in your own costs, your prices, and stick to them. And do not forget, there is everything in selling and how you do it.—*W. M. Metzker, Milwaukee.*

NEWSPAPER WORK

By G. L. CASWELL

Publishers desiring criticism of their papers or mention of rate cards, carrier systems, subscription plans, etc., are urged to write Mr. Caswell in care of this magazine. Newspapers are not criticized by letter.

Fade Out "Country Newspaper"; Appear "Local"

The so-called "country newspaper" of 1890 and 1900 has just about faded out of existence.

Don't get excited about that statement, now. What we propose to maintain is that the "country newspaper" is now in fact and in truth a local or community newspaper; a business operated for profit in a well settled and stabilized community that is a business center for a rural population of thousands of people.

'Way back in 1890 when land notices and politics were the main incentives to the country newspaper business, there were more such newspapers by far than there are today. It required but a payment down on an old Washington or Army hand press and a few fonts of type and some leads and slugs to set up a print shop that could produce a newspaper. New territory was being opened up, new towns platted, and many hopeful prospects loomed as a mirage in the distance. Income was meager for the newspaper, and subscribers fewer, but the newspaper influenced votes and the politicians managed the legal notices.

In those days the "country newspaper" was truly just that. It had its functions and performed them. Its editor got some experience, occasionally some wealth, and often landed finally in some position of consequence. The writer attended the funeral of one such "country newspaper" editor recently. He was eighty-six years old, and for the last fifteen years had been publishing a county-seat newspaper in the midst of a county population of 19,000 where but 500 people had lived when he first issued his country sheet. At his funeral were all the local townsfolk, as well as prominent fraternal men and citizens and publishers from a wide territory. No millionaire could have bought the kindly, honest, and sincere praises and sentiments expressed for this editor as the last rites were performed in laying his body away to

eternal rest. He had lived well, honestly, efficiently, and had been a man of influence and example all his life.

When he died his newspaper property was worth more thousands of dollars than the hundreds value of the first little country weekly he had acquired in his young manhood.

This is a fair example of what I mean when I say that the "country newspaper" has just about faded out of existence. There is little left but the smell of the ink similar to the newspaper of forty, and even thirty, years ago. The community has become fully settled. There is no country of wide open spaces with wild animals and free range and few people. On every mile there are from two to four fine residences, surrounded with great barns and good sheds and water tanks and silos. Telephone wires run in to the houses and electric wires are tapped at the gates for light, heat, and power. In the machine sheds stand good automobiles and in the houses modern radios bring daily to the families music, entertainment, and market service.

That sort of thing is not "country." These people are modern, money-spending citizens, and they have as much of everything excepting bright lights as do the people in Kokomo or Albany.

The community centers are towns of comfortable inhabitants or more pretentious county seats where the legal and public business of the community is transacted. Here the hum of great industry may not be heard, but the grim hazard of business is ever present and with competition to spare.

Now the local newspaper supplies all such territory with service that can not be duplicated in any other medium or by any other means. The local newspaper is the center of the business and social community, its publisher in constant touch with the pulse of the people and its voice effectively heralding the news, facts, and fancies of a 100 per cent reading public.

And this local newspaper is now a business institution. Its type-composing machines may have cost several

thousand dollars, and its rapid presses some thousands more. Its electric power is harnessed for ready and continuous use. Its circulation may be county-wide, or what we call local—that is, to and among people acquainted in the territory and interested vitally in its progress and its doings. To function properly this local newspaper must hire competent and dependable workmen, have a considerable corps of community correspondents, use high-priced news and illustrated features, and have the facilities to cast these from mats, to accommodate its patrons.

The business end of the local newspaper is based often on a larger capitalization than many of the banks, and the publisher frequently has more real money invested in the business than the banker has in his. And the advertisers use this newspaper medium for their announcements to the trade of the prosperous territory as being the best and most prompt and economical service possible for them to get. For this service they pay in cash, not in trade; by check, not in silver.

Let us get out of our minds the old joke about the "poor country editor" who slept on husks and lived on what the subscribers brought in to pay for subscriptions. Let us also get out of our minds the "country newspaper" idea as applying to a sparsely settled country of wild animals and meager resources. Long ago those wide open spaces disappeared and the land is cultivated, and civilization has bloomed forth here as a most decent, law-abiding, prosperous, and genuine example of our modern American life.

Circulation Audits for Local Papers—Maybe

Since daily papers and magazines are making so much of the idea of audited circulations, the weekly press is taking note and contriving ways and means for having their lists checked. First, there is the cost of making such audits by some recognized authorities. In the larger field the Audit Bureau of Circulations was long ago set up by the

publications interested. It is a big organization now, and highly paid and efficient men are in charge of its various activities. Newspapers and magazines do not hesitate to pay from \$90 to \$150 or \$200, if necessary, to have a detailed analysis made of their circulations in order to present the certificates and have them accepted by advertisers. Most smaller newspapers can not stand such an expense, or feel they can not; neither have they been sold on the idea that it would pay them if they did.

Circulation statements may be valuable and have weight in favor of more business in certain cases, but, in the field of smaller newspapers, circulation is the easiest thing to get and the hardest thing to sell, under competition, at a price based on such circulation statements. Or, rather, a slight or even a material difference in circulation in the local newspapers is not taken into account so vitally as among larger publications and by national advertisers.

Many local publishers hold a firm and partially warranted belief that there is a lot of "bunk" about these so-called audited statements of some farm and other periodicals. They know, first hand, in their own fields just how some of this circulation has been gained and how it is carried. We have known cases where such magazines came to a local post office for delivery to people who were long since dead and gone, whose children had grown up and separated, and whose estates had been dispersed until hardly a trace of the original "subscriber" was left. Our local postmasters have shown us packs of such periodicals held without delivery where half a dozen copies were directed to persons in the same household—and to a bank director, bank cashier, member of the town council, and member of the commercial club, all one and the same person.

In other cases circulation known to them to be utterly fictitious or padded has been shown to be "audited and certified." In one such case the writer reported the fact and got the reply that the circulation as certified was correct, but that the auditor did not go into the matter of duplications or fictitious circulation. Therefore it was useless to complain or report or disparage the figures as given. We understand that this feature of the matter has since then been largely corrected; that fictitious circulation is refused recognition, and so far as possible only the legitimate claims for circulation are certified.

However, many local publishers have had their faith in the value of audited circulations largely discounted by what they knew to be facts, and for that reason they have failed to get excited to

the point of caring to pay for circulation audits where their competitors might "go them one better" in the way of presenting a padded list.

Now the need for certified circulation statements is becoming more impressive, and we find this subject listed as one for discussion and debate at many of our state and district newspaper conventions. Since circulation of local newspapers now costs them real money, and they have discovered that excessive circulation only adds to their losses on advertising carried, which in turn requires a raise in local rates, the matter of audited and detailed circulation statements is of vaster importance.

How to get such audits, and at a price they can afford to pay, is the usually debated question now. Many suggestions are advanced, and some of these are radical in that they propose to require all members of an association to secure such audits—until it is found that only competent and well-paid men would be acceptable as auditors and that no hit-or-miss checking up of lists would do any good whatever.

It has been proposed that the field managers, in states having such representatives, might make it a part of their duties to visit their member papers and give the lists a checking that might be certified and accepted. But, when this has been proposed and the economy of the plan pointed out, there has been an utter lack of applications for the service. Then the field manager has proposed that he can hire expert men to make the rounds at so much per diem and expenses and that these men can make the count of subscribers and certify the lists of local newspapers wanting the service. Again, very little if any response.

The fact is, while local competition exists to an extent that domination of the field is in question as between two or three local newspapers, the publishers are not keen for a checking up and certification of their lists. It might not substantiate the claims of some that they have the advantage in their territory, and in such case their competitors would have excuse and ground for discounting their standing. Not that their own circulation figures would be discovered wrong or fraudulent in the least, but—and here's the rub—the other fellows might run in a galley or two of their sample list and fool the auditor into making a certificate that would show the other paper to be the dominant publication in the field.

This glaring possibility can not and will not be universally faced with courage by the local publishers anywhere. They would prefer to make their own audits, prepare their own detailed

statements, and present their claims as "sworn circulation," which claims may be set out in their rate cards and other listings and carry what weight and prestige they will.

It is the judgment of this writer that the time is a long way distant when a general audit of circulations and detailed statements of sworn circulation will be found among local newspapers—daily or weekly. However, they are headed that way, and some of these days in some state a system will be adopted that will work. Our idea is that some reputable newspaper man or auditor can be secured at a fair daily or weekly wage who will develop a system of circulation audits that will prove worthwhile and that will not be prohibitive in its cost to the medium or large local newspaper. We are not sure, furthermore, that there will be any value in such audits, if made.

Newspaper Review

By J. L. FRAZIER

ESSEX PUBLISHING COMPANY, Essex Junction, Vermont.—You ask, "Are the legal ads. published in your edition of March 8, set in five-point, better than fourteen lines to the inch, worthy of comment?" We have measured fourteen lines and find it comes to exactly one inch, so hardly know what you are driving at. Of course, no one ever reads these things, so the fact that the size is so small and the letters so thin is of no particular consequence. We suggest that you concern yourselves with the question of the first page. Except for a little patch in the center and at the top, it is filled almost entirely with display advertising. Consider the first page of the Northfield (Minnesota) *News*, shown in this issue, and see if you do not agree that a page of similar makeup would be a step forward.

The Chandler *Arizonan*, Chandler, Arizona.—Your special edition of March 22 is one of the most unusual we have ever received from a town of one thousand. Frankly, we did not think it possible. The regular first page and the special sectional first pages are remarkably fine, excellent taste being evident in makeup. Heads are in attractive faces; Cheltenham Old Style is a great relief to one who is sick and tired of the ugly and conventional extra-condensed block-letter type usually found in newspaper headlines. You have done an exceptionally fine job of printing the halftones on ordinary news-print stock, and the mast head is remarkably good. It is only where exceptionally heavy rule or light and "spotty" slug borders are used, furthermore, that adverse criticism may be applied to the advertisements.

The Falmouth *Outlook*, Falmouth, Kentucky.—Your special twenty-page edition of March 16 is exceptionally fine, remarkable, in fact, considering your town has only 1,500 inhabitants and the county but 11,000. Although not symmetrical, the first page is well balanced; the only fault of any serious consequence is the spacing of the second deck of the top headings. There is altogether too much space between words, the lines are crowded and there is entirely too little space around dashes. The presswork is exceptionally good; the results achieved in printing halftones on the news stock is little short of remarkable. We are glad to find the advertisements pyramided, but the setups are not as a rule good. One trouble is crowding and another is the extensive use of condensed types. The crowding is by no means general, however: in some cases, as, for instance, the A. & P. display, you have gone to the opposite extreme. White space is wasted in this advertisement; it is scattered here and there and the benefits that

NORTHFIELD NEWS

NORTHFIELD, MINNESOTA, FRIDAY, FEBRUARY 10, 1928

VOLUME 52 NUMBER 4

Council Decides To Mark Streets With New Signs

Will They Then Be Shaded? Northfield Council has decided to mark the streets with new signs. The signs will be placed at the corners of the streets and will be of a new design. The council also decided to mark the streets with new signs. The signs will be placed at the corners of the streets and will be of a new design.

McKenzie to be Candidate For Re-election as Mayor

McKenzie, who has served as mayor for several years, has announced that he will be a candidate for re-election as mayor. He has received the support of many of the citizens of Northfield.

Changes Made In Five Northfield Retail Concerns

Five retail concerns in Northfield have made changes in their management. The changes are expected to result in better service to the customers and more efficient operation of the stores.

County Agent to Be Here Monday

The county agent will be in Northfield on Monday. He will be here to see the farmers and to discuss the various problems of the county.

Will Hold State Oratorical Here

A state oratorical contest will be held in Northfield. The contest is open to all students in the state and will be a great opportunity for them to show their talents.

County Agent to Be Here Monday

The county agent will be in Northfield on Monday. He will be here to see the farmers and to discuss the various problems of the county.

THE WASECA HERALD

WASECA, MINNESOTA, FRIDAY, MARCH 23, 1928

VOLUME 12 NUMBER 12

School's Tax Dispute Will Reach Court

The school's tax dispute will reach the court. The school board has filed a suit against the town, claiming that the tax is too high. The court will decide the matter.

20 Citizens Seek Offices In Election

Twenty citizens have announced that they will be candidates for office in the upcoming election. They are running for various positions in the town and county.

14 Delegates Depart for 2 Conventions

Fourteen delegates have departed for two conventions. They will be representing the town at the conventions and will be working to secure the best possible results for the town.

Robt. Purchases Bank Interest; Will Be Cashier

Robert has purchased the bank interest and will be the cashier. He has a long history in the town and is well known to the citizens.

Imaginary Blaze Gives Scene for First Aid Display

An imaginary blaze was used to give a scene for a first aid display. The display was a great success and the citizens were very interested.

Gardner Gets Requested Honors

Gardner has received the honors that he requested. He has been recognized for his many contributions to the town and the community.

Minnesota publishers dispute idea six-column page can not be made up effectively.

are to be had from white space are sacrificed. The border is too weak in relation to the type; in fact, whereas we usually have to criticize borders as being too heavy, those you employ are often too light. On the other hand, six-point face rule is used as border on some displays. This is altogether too heavy; a parallel two-point face would have been much better. The parallel rule border would have sufficient width to suit the advertisement without being so strong in tone as to draw attention from the type. Editorially, the issue appears first class; you have apparently made the utmost of available material for news.

LOUIS E. KRUEGER, Waukegan, Illinois.—In the striking illustration and lettering furnished, you had a great opportunity on the Hein advertisement, "Spring—1928." You did not, however, make the most of the opportunity. One mistake is mainly responsible, i. e., setting the body in too narrow a measure. This necessitated a wide variation between the margins at the sides and the one at the bottom. If the lines were longer the short final one, which is unpleasant and improper standing alone, would have been avoided as the marginal space around the bottom was equalized. The page ad, for the Callahan Dairy Company is a splurge of bold-face type—frightful! It emphasizes the need, here and there, of the relief white space affords. The different display points run together, and as all the type is relatively large the important features, lacking contrast, do not stand out. With so much white space going to waste along the sides, it was possible for you to rearrange some of the lines in order to introduce more space up and down. The McCulla ad. is relatively much better, although the text type is too small throughout.

F. B. DEAN, Alhambra, California.—We consider the hand-set sections of your news-heads entirely too large. Their effect is not pleasing and, as a rule, they over-rate the importance of the items. They are unusually well placed, in fact, and every part of the page is interesting. There is too little space around the dashes in the heads—in other words, the different sections are crowded and in consequence of that

rather confusing. Exceptionally wide spacing between words in some headings is a fault that will be irritating to many readers. Although the presswork is better than average, it would be improved if you used a little less ink and more impression. The advertisements are well displayed and arranged, but not as pleasing as they might be because type faces of different styles and shapes are combined, also because of the selection of borders. We find twelve-point rule border used in some cases. It is entirely too strong and overbalances the type. On the other hand, the border of the Golden Rule advertisement is too light. The best plan is to establish two-point face rule as standard border; it may

be used singly on small advertisements, parallel on spaces up to a quarter page, say, and triply on half and full pages. The width of three rules with white between will suggest strength sufficient for the larger advertisements without having the tonal strength that a single rule of even thickness would have. Advertisements are not handled with any system in makeup. One style of arrangement is followed here and another there. The worst feature of all is that advertisements often run from top to bottom of the page on both left and right hand sides. The upper left-hand corner of a page should invariably contain reading matter so that when a reader turns to the page he will not be inconvenienced or irritated. Many aver that an advertisement in the upper left-hand corner of a page is very likely to be passed by because the reader wants news at that point in his travels through the paper. These also argue that an advertisement in the lower right-hand corner of the page, one member of a pyramid, is more likely to be read than one at the top, for when the reader has finished the text he is in the right frame of mind to take up advertising.

The Waseca Herald, Waseca, Minnesota.—Your issue for March 22 is a dandy. Despite the fact that display headings of the same style are at the top of the two center columns, something usually feared, and with reason, by publishers having six-column papers, the appearance of your first page is unusually attractive, as our reproduction indicates. We particularly like the headings in Cheltenham Bold; they're so much better than any set in the time-honored gothic faces could be. The advertisements are excellent; although the borders vary, the fact that the ads. are well arranged and the display contrast, makes the result less damaging than is usually the case.

Illinois State Journal, Springfield, Illinois.—Your issue for March 7, establishing a new type dress, is commendable. The best features are not the first page or the general makeup, but the composition of advertisements, which is considerably above average. The sub-decks of the top headings lack body, due to the exceptional short length of the second and third lines. The effect is further weakened by the fact that spacing

FORMAL

SPRING OPENING

A Brilliant Collection of Smart New Models



Montgomery's

514 South Side Square

"Styles of the Hour"

Adapted to the latest fashions

From "Illinois State Journal," Springfield.

between words is usually too wide. The headings in light-toned type afford quite too great a contrast in comparison with those set in the bold-face gothic. We suggest a slightly bolder type for these, say, Goudy or Cloister Bold. The headings are not as well balanced as they should be; too many of the two-line bold headings appear around the bottom of the page, which, of course,

would be excellent. Except for the fact that sub-decks are too closely line-spaced, the headings are unusually good. The addition of two-point leads, also between the lines of the head set in Goudy Bold italic, would be an improvement. We would prefer to see the lines of the two-line cap. heads centered rather than set drop-line fashion; the style is not so satisfac-

The *Advocate-Republican*, Audubon, Iowa.—The first page of your issue for February 16 is a crackerjack. There is a sufficient variety of headings; for the most part they are attractive and well placed on the page, all parts of which are interesting. The decks in the top heads set in the smaller type are line-spaced too much and there is not enough space around the

Strong parents bear sturdy offspring.
Heat Transfer Products, Inc., a
division of the Staten Island
Shipbuilding Company,
began its career, not as
an infant, but with the
strength and resources of
a thirty-three-year old
organization. **Q** Building
heat transfer apparatus is
not new to its engineers.
Q Probably no other or-
ganization has been as de-
liberately planned, as care-
fully built and as completely
equipped to produce the
many types of apparatus
used for the storage and
transfer of heat. **Q** The per-
sonnel of the Company com-
prises only men who have
written heat transfer history.
Individually they are out-
standing in their respective
work. Collectively they are
an authority on every phase
of heat transfer manipulation.
Q When you consult Heat
Transfer Products, Inc., you
may do so with the full assurance that
no better engineering ability is any-
where available. **Q** And remember, when you place
contracts with this Company you are dealing with an or-
ganization of unquestioned trustworthiness, ability and

STRENGTH



Engineering data and estimates will be gladly fur-
nished on equipment for the following applications:
Power Plants **Chemical Plants** **Refrigeration**
Oil Refining **Air Conditioning** **Textile Mills**
Gas Plants **Heating and Ventilating** **Laundries, etc.**

Q Send for information on the type of
Q apparatus in which you are interested.

HEAT TRANSFER PRODUCTS, INC.
A Division of THE STATEN ISLAND SHIPBUILDING COMPANY, 40 West Street, New York

A
flow in a
piece of heat transfer
equipment may mean the loss of life
and money. Deviations from specifications are always costly in the long
run. Anything less than the best engineering practice and construction
methods invariably invites trouble and production losses. Deliv-
ery delays are a poor remedy for industrial growing pains.
Q When you contract with Heat Transfer Products, Inc.,
you fortify your responsibility by a mighty shield of

PROTECTION

Heat Transfer Products, Inc., protects you against inferior de-
sign by means of employing the best engineering skill available.
Q Protects you against poor manufacturing methods by owning
and operating the most modern plant in the industry. **Q** Protects
you against unsuitable parts by producing in its own shops pre-
cisely every unit required for every piece of apparatus it builds.
Q Protects you against delivery delays by manufacturing and assem-
bling under one unified supervision, every piece of equipment it
constructs. **Q** Protects you against defects in materials by maintain-
ing its own metallurgical control laboratory. **Q** And protects you
against trouble and costly breakdowns by selling proper equip-
ment for adequate shop tests. **Q** You incur no obligation
whatever by consulting Heat Transfer Products, Inc., about
your problem. But you do involve the services of the most
complete organization manufacturing heat transfer
apparatus. And you are assured of the most
competent advice obtainable. **Q** It
will pay you to con-
sult us

Engineering data and estimates will be gladly fur-
nished on equipment for the following applications:

Power Plants **Chemical Plants** **Refrigeration**
Oil Refining **Air Conditioning** **Textile Mills**
Gas Plants **Heating and Ventilating** **Laundries, etc.**

Q Send for information on the type of
Q apparatus in which you are interested.



HEAT TRANSFER PRODUCTS, INC.
A Division of THE STATEN ISLAND SHIPBUILDING COMPANY, 40 West Street, New York

A
man earns
the title of ACE
when he does his job
better than his fellow work-
ers. There are industrial Aces
as well as individual Aces. **Q** Heat
Transfer Products, Inc., is an organization
of Aces. It was conceived and built around
one big idea—to design and manufacture in its
own plant a complete line of heat transfer apparatus.
Q Its ancestors were shipbuilders for almost a half cen-
tury. It inherited one of the most modern plants in the
country. Engineering ability of the highest type ran through
its veins. The most modern machinery formed its bones and
sinews. **Q** But machines are dependent on human brains for
efficient operation, and production is built on experience. **Q** And
so the hunt for Aces began. One engineer was selected because of
his uncanny knowledge of heat transfer. Another because he was
internationally recognized as the foremost refrigeration authority.
Still another because he excelled in design. **Q** Engineers, designers,
metallurgists, superintendents, foremen, riveters, welders, galvan-
izers, were mobilized. Thirty buildings, tons of machinery,
locomotive cranes, shipping docks and a myriad of manu-
facturing essentials were coordinated and geared for
economical production. **Q** Heat Transfer
Products, Inc., now
ranks as one of the
important concerns of
America. When you bring
your heat transfer problems
here, remember that every man
who works on your job, is an



ACE

Engineering data and estimates will be gladly fur-
nished on equipment for the following applications:
Power Plants **Chemical Plants** **Refrigeration**
Oil Refining **Air Conditioning** **Textile Mills**
Gas Plants **Heating and Ventilating** **Laundries, etc.**

Q Send for information on the type of
Q apparatus in which you are interested.

HEAT TRANSFER PRODUCTS, INC.
A Division of THE STATEN ISLAND SHIPBUILDING COMPANY, 40 West Street, New York

Shaping advertisements into forms symbolical of the theme. Outstanding publicity prepared by Picard, Bradner & Brown,
New York city, for Heat Transfer Products, Incorporated.

is something that can not be avoided, at least always or altogether. Presswork is unusually good. We are reproducing the Montgomery advertisement; the Barker advertisement, while pleasing in the main, is not nearly so effective, particularly because the body type is too small. There is ample space for type of larger size, the use of which would increase results. Your special of March 29, featuring two sections titled, "A Sight-seeing Tour of Springfield," is unusual. Points of interest are illustrated and described in an unusually effective way. These reader items are not ostensibly advertising.

East Central Journal, Ada, Oklahoma.—While the print is a trifle pale, your issue for March 19 is nevertheless readable. The makeup of the first page is well balanced, but the lines of a number of the hand-set decks are too short. Lines of drop-line heads should be about four-fifths as long as the column is wide; in a number of those in this issue the lines are scarcely more than half-column width. The headings are crowded, and there is too little space around the dashes. We are pleased to find the advertisements pyramided, but while these are ordinarily well arranged and displayed the use of widely contrasting weights of border in adjacent displays creates an unsatisfactory effect. Best results come from the use of plain rule borders, the width of which should to some extent match the size of the advertisements. Rather than use six or twelve point rules, however, use two and three of two-point face parallel.

EARL FREDDY, Hoisington, Kansas.—The two-page advertisement for Faneuil & Morrison Dry Goods Company is well balanced throughout; lines, however, are often crowded. While this is often an unavoidable condition, it certainly could have been obviated in the center panel where some of the matter is set narrow measure with a made-up bracket at each side. If this group had been set full measure, a larger size of type could have been used and in addition space would be left for leading out some of the other matter. The rule used in paneling is too light and we think the ornaments used at the ends detract rather than add. A plain double or parallel rule would have been much better than the ribbon border on the outside.

PALMER G. GILBERTSON, Lake Crystal, Minne-
sota.—You have solved the six-column makeup very satisfactorily; if it were not for the fact that too much ink was carried, the appearance

tory on a heading of this size and kind as on the main section of a top head. The advertise-
ments are excellent, particularly with respect to display and arrangement, which, of course, includes whitening out. The appearance of the paper is not as pleasing as it might be because of the use of a variety of styles of borders. The egg and dart border of light tone is hardly appropriate for an advertisement in which the display is in Cooper Black, and a six-point rule border is too black for any page except perhaps a full-page advertisement of the fire sale style, and in which there is considerable bold display. We regret the fact that advertisements are not pyramided on all pages, although you do keep the upper left-hand corner clear, which is the next best thing to a consistent pyramid.

dashes, which creates a confusing, jumbled ef-
fect. While advertisements are unusually well arranged and displayed, their appearance and that of the whole paper is weakened by the character of borders used. Instead of plain rules, which make the best possible border, you use a variety of decorative borders, the one of alternating gray and black squares being particularly objectionable. It is also bad practice to use a black corner-piece instead of a regulation complete border. On an advertisement as large as that of the Audubon Hardware Company, with extra bold display type and a large illustration, the unit border referred to above is not so objectionable. The border on the Anderson advertisement is altogether too light; it is also otherwise inconsistent with the type. Pyramiding the advertisements gives your pages an orderly appearance.

Evening Pajaronian, Watsonville, California.—Your sixtieth anniversary issue, dated March 8, is a crackerjack. There is not only an exceptionally large amount of news, remarkably well handled, but a big volume of advertising. Presswork, although a trifle light in spots, averages very good. The best feature of all, however, is the composition of advertisements, in some of which the best of the up-to-date type faces are used. We regret the variety of borders, especially those having pronounced units, each of which is a source of attraction to the eye. Their use can not do otherwise than reduce the effectiveness of advertisements. We also regret to find the advertisements are not pyramided, and especially regret that there is an advertisement in the upper left-hand corner on almost every page, where, of all places, none should appear. Reading matter in almost every instance is bunched in the center of the page, with advertisements here, there, and everywhere.

Northfield News, Northfield, Minnesota.—Your paper is known throughout the country as a model small-town publication. It is ably edited, beautifully printed, attractively made up, and, except for occasional lines of condensed block-letter type, the advertisements are fine. No wonder copies of your paper are requested by schools of journalism for class work. We are reproducing the first page of your issue for February 10, and direct the attention of other readers to the style of type in the news-heads. Isn't the face a great improvement over the time-worn and ugly condensed block-letter face?

type
of the
of the
of the

Typographic Keynotes cannot be struck at random!

First, the sales idea—scientifically evolved, painstakingly polished. Then the mode of presentation—the form, the tone of voice.

Type is the tone of voice in advertising—and tone of voice is a subtle and essential factor in the sweet symphony of sales. And because type makes the difference between the first and final impression, its "usual qualities" should be in perfect harmony with the message it carries.

Small wonder, then, that advertising men strive so earnestly to secure type set-ups pitched in the proper key! Goodwork and random selection will not do. A sound knowledge of type faces and their use must be called into play; there must be careful analysis of copy "appeal," followed by skillful and sympathetic handling of the type face subsequently chosen.

The Thos. P. Henry Company has arrived at advertising typographers for little over a year and a half, yet during that time it has more than doubled its staff, twice enlarged its quarters, and played an active part in the creation of outstanding local and national campaigns.

THE THOS. P. HENRY COMPANY
ADVERTISING TYPOGRAPHERS
41 Berroughs Ave. DETROIT Empire 3401

Magazine advertisement by well known Detroit
advertising typographer.

TRADE NOTES

Brief mention of men and events associated with the printing and allied industries will be published under this head. Items should reach us by the tenth of the month.

National Editorial Association to See Tennessee

The forty-third annual convention of the National Editorial Association, which will be called to order by President Charles M. Meredith at Memphis on May 28, will more than justify the time and expense involved in attendance, through the information and personal contacts afforded those present. But the pleasures incidental to the convention come close to overshadowing the main reason for hurrying south at this time, so tempting is the array of entertainment.

Memphis itself has noble plans for the accommodation and feting of the convention visitors, and has perfected arrangements which assure the smooth operation of these plans. Upon conclusion of the final session, however, the guests will embark upon an ambitious "Seeing Tennessee" expedition which will lead them through thirty cities of the state and even, briefly, into Arkansas, Mississippi, Alabama, and Georgia. The scenic attractions of the East Tennessee mountains and luncheon on Lookout Mountain are highlights on a schedule which displays few features of a lesser character. The editors who are able to break away and take the family to Memphis may well be envied by those who are unable thus to combine business and pleasure. It will be an enjoyable and profitable meeting.

Burke, of Macon, Passes Away

Edward W. Burke, president of the J. W. Burke Printing Company, Macon, Georgia, died on April 8 at Macon after a heart attack. Mr. Burke had managed the company since the death of his father many years ago, but recently had placed much of the management in the hands of a nephew, E. W. Burke, Jr., to allow himself more time for activity in civic affairs and other interests. He was a charter member and past president of the Macon Rotary Club, and past president of the Macon Chamber of Commerce. Mr. Burke was an active leader in the af-

fairs of Macon, and his passing will be noted with regret by local members of the printing industry, fellow citizens, and many printers of the South.

He's the New Right Bower of the I. P. Editor

Meet the other portion of the editorial combination: Milton F. Baldwin, new associate editor of THE INLAND PRINTER. Away back in high-school days he first knew the rumble of the Babcock and the feel of the composing



Milton F. Baldwin

stick. The urge to print has held him close to the plant ever since, in one capacity or another. He reigned at the proof desk of the New Haven Register when H. I. Phillips, now known nationally for his *American Magazine* comedy and caricatures, was its managing editor. In prep school Baldwin divided his time between classroom and pressroom, and took journalism at the University of Illinois when he wasn't proofreading the *Daily Illini* for the wherewithal. Two years of service with the University of Chicago Press helped

to develop his knowledge of good typographical style and bookmaking, while editorial experience on the *Red Book Magazine*, in the field of fiction, and *Domestic Engineering* and other publications in the trade field, will enable him to administer his share of general editorial duties. Add to this description a tendency for and proven ability in the development of sound merchandising ideas — which our field always needs — and you have Baldwin's background.

He is an overseas veteran. Most important, Baldwin's standards for a hard-hitting, effective publication coincide exactly with the editor's plans for THE INLAND PRINTER. He knows that such a magazine can not be developed from the firing line of a swivel chair. You will find him out where the significant things are being done.

A. I. G. A. Exhibition of Updike's Work

On April 11, the American Institute of Graphic Arts opened in New York city, at the Art Center, its newly appointed exhibition room, with a showing of fine books from the Merrymount Press, Boston. It was to commemorate the thirty-fifth anniversary of the founding in 1893 of this now world-famous press by Daniel Berkeley Updike. The exquisite taste and skill that Mr. Updike has brought to the building of books and the handling of all printed matter that passes through his press is amply demonstrated here. Every book in the seventy-seven examples shown is in itself a joy to behold and makes a book lover eager to possess it. It will be remarked that halftones are not used in illustrating these books. Mr. Updike prefers photogravures as inserts, woodcuts by Rudolph Rusicka or photoengravings in line. The latter harmonize so well with type and print so easily on the antique paper used. The exhibition continues during May and it would be an education to printers and the public generally if it could be shown in other printing centers than the metropolis.

Conference on Printing Education at Carnegie Tech.

The seventh annual Conference on Printing Education will be held at Carnegie Institute, Pittsburgh, June 25 to 27. These sessions, which are sponsored by the United Typothetae of America, should be of particular interest and significance because of the caliber of the speakers and leaders of discussions already assigned to the programs.

On the opening day the topic, "If I Were a Teacher of Printing," will be discussed from the viewpoints of the

Trade School, Worcester; E. E. Sheldon, Lakeside Press, Chicago; John E. Mansfield, Wentworth Institute, Boston, and Allan Robinson, Mergenthaler School of Printing, Baltimore.

Announcement is made that the first summer session of the Department of Printing, Carnegie Institute of Technology, will also start on June 25, the opening day of the conference, and will continue until August 3. Arrangements have been completed whereby teachers of printing may take work at this session and also carry courses in

Grant, of Chevrolet Motors, to Address I. A. A.

Verne Burnett, the chairman of the program committee of the International Advertising Association's big twenty-fourth annual convention, meeting at Detroit, July 8 to 12, announces that R. H. Grant, vice-president in charge of sales of the Chevrolet Motor Company, is one of the feature speakers scheduled to address the convention on July 9. The subject of Mr. Grant's message is, "Relations Between the Advertiser and the Agency."

Mr. Grant resigned as sales manager of the National Cash Register Company in 1915 to accept the general managership of the Delco Light Company, a division of General Motors Corporation. After achieving unusual results in the development of the farm lighting business, and guiding the newly born Frigidaire business safely to a phenomenal success, Mr. Grant was elevated to the important position he now holds. His name on the program is a reliable index to the quality of the speakers and their messages at the I. A. A. convention.

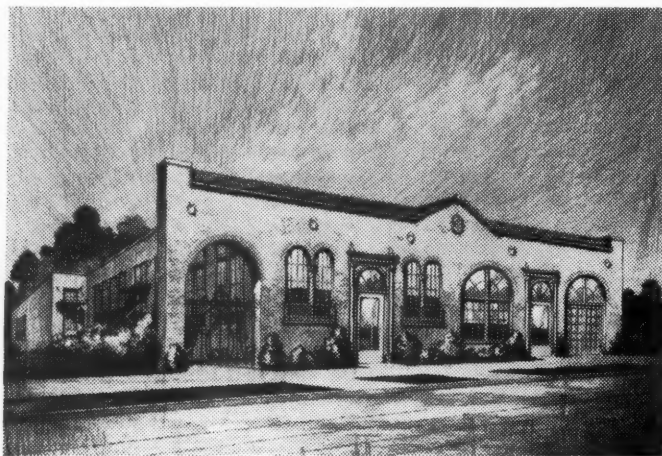
New U. T. A. Estimating Course

A new course in estimating is being prepared for the United Typothetae of America by Fred W. Hoch, of the staff of the New York Employing Printers Association, Inc. The text will consist of fifteen lessons and a series of copy-compilation charts, and also the average-production-records book, the latter being included under the same cover as a convenience to the students, although the average-production-records book maintains its distinct identity.

When the course has been completed it is to be submitted to a number of leading printers throughout the country for constructive criticism. The material will also be passed upon by Fred Hartman, the U. T. A.'s director of education, who will then submit it to the committee on education. The book will be completed by fall.

A Palace for Ink

The very attractive building shown herewith might appear to qualify as a studio of some sort. But be prepared for a surprise: it is the new branch of Charles Eneu Johnson & Co., ink manufacturers, at 1727 North St. Paul street, Dallas, Texas, and has just been completed. Certainly it sets a high standard of architectural beauty and operating efficiency, and establishes a worthy objective for any company in the printing and allied industries contemplating the construction of new headquarters.



New Dallas Home of Charles Eneu Johnson & Co.

printer, the engineer, the specialist in industrial education, and also the public school administrator, each viewpoint being presented by a recognized leader. George K. Hebb, printer and business man, of Evans-Winter-Hebb, Detroit, is to present the ideas of those in his group, and other professions will be represented by speakers of equally high ability. The constructive addresses and discussions planned will make this conference of outstanding importance to the interests of printing education and therefore to the entire industry.

Among those now listed for addresses or for conducting various discussions are: A. C. Jewett, Director, College of Industries, Carnegie Institute of Technology; L. H. Dennis, Deputy Superintendent of Public Instruction, State of Pennsylvania; I. H. Blanchard, Blanchard Press, New York city; John M. Murray, Frank Wiggins Trade School, Los Angeles; John J. Deviny, past president, International Association of Printing House Craftsmen; John L. Deal, Jefferson Junior High School, Rochester, New York; E. E. Vosburgh, McCall Continuation School, Philadelphia; Chester A. Lyle, Wm. McKinley High School, Canton, Ohio; Harry E. Milliken, Worcester Boys

education and psychology at the University of Pittsburgh. Students at the summer session at Carnegie Tech. are permitted to attend the meetings of the Conference on Printing Education.

Eighty Years Young

Charles Francis, dean of American printers, was, on April 19, given a testimonial dinner at the Waldorf-Astoria by the employees of the press he founded. It was in celebration of his eightieth birthday. Don C. Seitz, formerly business manager of the New York World, was toastmaster. Among the speakers on the program were Dr. J. Horace McFarland, Harrisburg, Pennsylvania; Major George L. Berry, Pressmen's Home, Tennessee; William Green, president, American Federation of Labor, and C. Frank Crawford, vice-president, New York Employing Printers Association.

Although chairman of the board of directors of his own press, Mr. Francis gives most of his active life to advising and directing the three schools for apprentices managed by the Union Pressmen, Typographical Union, and the New York Board of Education, Isaac H. Blanchard being chairman of the committee in charge of these schools.

Hogan of Heco Retires

George Francis Hogan, well known founder and president of the Heco Envelope Company, Chicago, is retiring from active business, and has disposed of his holdings in this company to three of his executives, Bernard H. Miller, Howard R. Brenton, and Fred W. Randolph, who hold the respective positions of president, vice-president, and



George F. Hogan

secretary and treasurer of the company. Mr. Hogan, as chairman of the board, will give the new management the benefit of his broad experience in this field.

Mr. Hogan has been in business for forty years. In 1903, a quarter century ago, he organized and was president of the Hogan Envelope Company, which continued until the formation of the Heco Envelope Company in 1913. The development of this organization to its present important position is largely attributable to the far-sighted and aggressive policies employed by Mr. Hogan, and his retirement is a distinct loss to the envelope industry.

Mergenthaler Company in New Chicago Headquarters

The Mergenthaler Linotype Company, Chicago, has moved from its old quarters at 1100 Wabash avenue to 531 Plymouth court, where a six-story building has been entirely rebuilt for the company's exclusive use. The new arrangement provides space to accommodate every department in comfort, with a liberal allowance for expansion as the business grows. All but the first floor have outside light on three sides, and the sixth floor, used for the linotype school and exhibition rooms, has the added advantage of natural light through two large skylights. General

offices are located on the fifth floor; the fourth floor is occupied by the accounting department, and on the third is the machine shop, with provision for storage of machines. The second floor is given over to the matrix department, and on the first floor are the city orders department, parts department, and the cashier's office. The various departments have all moved to the new building and are in good working order, and with these modern and capacious quarters the Mergenthaler Linotype Company is prepared to serve its patrons more promptly than ever.

The Industry at Large

AN INTERESTING and constructive program is being planned for the ninth annual convention of the International Association of Printing House Craftsmen, which will be held August 20 to 22 at Detroit. Several speakers of international reputation will be featured, in addition to the number of leaders known nationally for their valuable work in the printing and allied industries. The schedule of activities at the Detroit meeting, as concerns both the meetings and the recreational features, promises much for the delegates and their families.

THE third district conference of the International Trade Composition Association was held at the Stevens Hotel, Chicago, April 13 and 14. Selling campaigns, costs and their relation to profits, business management, typography, and other equally vital topics were discussed. Among the speakers were J. L. Frazier, editor of *THE INLAND PRINTER*; Lee Winston, St. Louis; Arthur S. Overbay, Indianapolis, and Russell A. Pettengill, Chicago.

THE TENTH annual convention of the Southern Master Printers Federation, which maintains and operates the Southern School of Printing, of Nashville, Tennessee, will be held at Asheville, North Carolina, June 18 and 19. Frank A. Barber, of the Inland Press, Asheville, and vice-president of the Federation for North Carolina, is chairman of the committee on arrangements and program, and he has promised to produce the kind of convention and entertainment that none can afford to miss. So, don't be among the missing.

FROM May 6 to 12 the completion of the twentieth year of the school of journalism, University of Missouri, Columbia, will be celebrated. Although this school was actually established by the board of curators in 1908, and was the first school of journalism in the world, instruction in journalism was offered at this university as early

as 1878 by Prof. D. R. McAnally. Thus this institution can justly lay claim to having conducted much of the pioneering work of a profession now receiving general recognition.

LUCIAN BERNHARD, creator of Bernhard Roman and Bernhard Cursive type faces, has been appointed lecturer on fine arts on the faculty of New York University. This appointment of Mr. Bernhard indicates a recognition of his ability as a type designer and as a poster artist and designer of modern interiors.

THE COST DIVISION of the color-graphic industries will hold its next meeting at the Hotel Statler, Buffalo, May 21 and 22, and all accountants and estimators in the lithographing or color-printing industry are invited to attend. The tentative program includes consideration of 1928 budgets for various old and new machinery and processes, and examination of the preliminary draft of an estimating manual for color printers and lithographers. Charles R. Stevenson, cost engineer for the division, will conduct a discussion of new methods of apportioning selling expense. As a feature of special interest, those present will be asked for an opinion on the thirteen-period calendar that is now being advocated by George Eastman and other leaders throughout the country.

PRELIMINARY architectural designs have been completed for a seventy-five-story building to be erected in New York city by the International Benjamin Franklin Society as a memorial to Benjamin Franklin. William Guggenheim, chairman of the memorial committee, states that the structure will cost between \$15,000,000 and \$18,000,000; it is to be erected on a plot 200 feet square, in central Manhattan if a site is available, and the thirty stories of the main section will be topped by a forty-five-story tower 100 feet square. While most of the building will be devoted to business offices to make the project self-sustaining, several of the floors are to be used for a Franklin museum, auditorium, and memorial offices. The entire building will be encircled at street level with bas-relief panels illustrating various periods of Franklin's career, and four figures of Franklin will be set into the tower.

THE SECOND annual pilgrimage of the Blue Pencil Club Abroad—college students, teachers, and writers desirous of studying newspaper work in Europe—will include in its itinerary the International Press Exhibition at Cologne, Germany; Bruges, Belgium, where Caxton printed the first book in English in 1475, and other places of

literary and journalistic interest. The group will leave Montreal on June 29 and return to New York on August 24. This party, which is limited to twenty-five members, will be directed in its activities by Harry Hillman, former editor of *THE INLAND PRINTER*; Prof. Leland D. Case, former staff member of the *Paris Herald*, and Prof. Lawrence Martin, editorial writer of the *Evanston (Ill.) News-Index*. Foreign methods of news-gathering and newspaper production will be studied, and lectures by European newspapermen are being arranged. During its travel the club will visit *The Scotsman* at Edinburgh, the *London Daily Mail*, *Le Matin* at Paris, and the European editions of the *New York Herald Tribune* and *Chicago Tribune*.

THE current issue of *The Warren Standard*, published by the S. D. Warren Company for the consideration of problems concerning paper and printing, gives complete details concerning a new means of practical service to the printer and his customer. In cooperation with the leading manufacturers of ink, exhaustive tests have been conducted with every brand of Warren paper to determine which inks would yield most effective results with each kind of stock. A preliminary survey of the material indicated that Warren papers could be divided into four general groups as to printing surfaces, and this was done, after which the experiments were conducted and the results recorded. A printing ink chart has been prepared giving the kinds of ink tested and found satisfactory for the papers in each group, and thirteen of the well known ink manufacturers are now offering sets of tested black inks certified by means of these tests. Copies of the printing ink chart in conveniently large size will be forwarded gladly if you address the S. D. Warren Company at Boston.

THE Kansas State Teachers College, Pittsburg, announces the first summer school for teachers of printing, to be held in connection with the usual summer school, and covering nine weeks of instruction. Included in the curriculum are: contents of the printing courses; methods of conducting the printing courses; the technic of the printing art, with actual practice; news writing; and even the printing of para block and linoleum will be touched upon as examples of progress in the art. The course opens on May 28.

THE "Diet Number" of *Typo Graphic*, the friendly house-organ published by Edwin H. Stuart, Incorporated, Pittsburgh, is establishing a practice which might well be emulated

by other house publications of high character: the sale of advertising space to local institutions. This issue carries full-page advertisements for a commercial artist, an advertising agency, a photoengraving house, a printing company, and a gift shop. And, of course, the layout and typography of these pages are entirely comparable in quality with the rest of *Typo Graphic*.

ANNOUNCEMENT is made of the merger of two electrotype and engraving companies of Buffalo. The Buffalo Electrotype and Engraving Company, 64 South Division street, and the Crescent Electrotype Company, of 346 Ellicott street, have combined under the name

WHAT'S NEW THIS MONTH

THE LYON Metallic Manufacturing Company, Aurora, Illinois, describes a method by which one of its customers made a modernized system of cut storage pay its own way. Finch & McCullough, printers at Aurora, decided to install a system of steel shelving for cut storage in place of the badly warped wooden shelving. All cuts on hand were proved, and the proofs were sent to



Installation of steel shelving for cut storage in plant of Finch & McCullough, Aurora, Illinois. The clean-up of old cuts preceding the purchase of this equipment netted \$180.

of the Buffalo Electrotype and Engraving Company, Incorporated. Business will be continued at 64 South Division street with greatly increased personnel and equipment which are made available by the merger. G. A. Betts is the vice-president and general manager of the new company, and William J. Onink is treasurer.

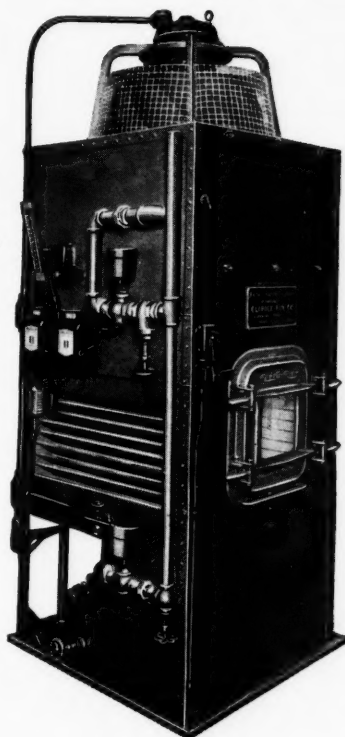
LEE SIAK HUNG, formerly professor of classics in the University of Canton, China, has arrived at Vancouver, British Columbia, en route to Toronto, where he will assume editorship of the *Chinese Times*. The new editor does not speak English, but this has not interfered with his development of distinctly occidental ideas as to the editorial policies vital to a successful and profitable newspaper. His plans, as told in the words of the interpreter, contemplate the publishing of a *Chinese Times* which is non-partisan, newsy, and altogether in line with the best practices of leading newspapers of the English language. The progress of his paper will be watched with interest.

the customers to be marked "active" or "obsolete." As a result, over a ton and a half of "dead" cuts were discarded, and this material, stripped from the blocks and sold at six cents a pound, yielded \$180. This sum practically paid the expense of the modern system of storage, while the new system saves time in reference and makes possible an accurate record of every cut in the plant.

R. HOE & COMPANY, INCORPORATED, are distributing a four-page folder giving specifications of the new Hoe Super Offset Press, which was pictured in *THE INLAND PRINTER* for February, page 815. This press was designed to produce a perfect quality of printing at high speeds, and will print and feed in accurate register, it is said, any stock from 40-pound label to 25-point board. The descriptive circular may be secured by addressing the company at headquarters, 504 Grand street, New York city; or by communicating with the company's branch offices in various important trade centers.

A SIMPLE COLOR FINDER which permits the selection of harmonious and effective color combinations is being distributed without cost by the Crescent Engraving Company, Kalamazoo, Michigan. The chart consists of four disks with respective diameters of $1\frac{1}{2}$, $2\frac{1}{2}$, $3\frac{1}{2}$, and $4\frac{1}{2}$ inches, each disk being superimposed upon the disk of next greater diameter and all turning on a common axis. The visible portion of each disk is printed in all shades of colors, each shade coinciding in width with a triangular section cut from the cover of the chart, so that by manipulation of the disks any combination of colors can be studied through the cut-out section of the cover, to the exclusion of the adjacent colors.

THE CLARAGE HUMIDIFIER shown herewith, manufactured by the Clarage Fan Company, Kalamazoo, Michigan, is a new development in unit air-conditioning equipment. A system of metal ducts is not needed with this humidifier; the conditioned air discharges directly and at high velocity into the atmosphere of the room, but in all hor-



Clarage Humidifier

izontal directions, so that scientific and efficient distribution is secured. One of these humidifiers is sufficient to condition the air for limited space or for one room, and the Clarage can be employed in batteries of units to provide for the needs of an entire building,

whatever its size. It is claimed that the use of Clarage Humidifiers in the pressroom will eliminate "static," and they are recommended for the maintenance of stock in proper condition in paper mills and warehouses.

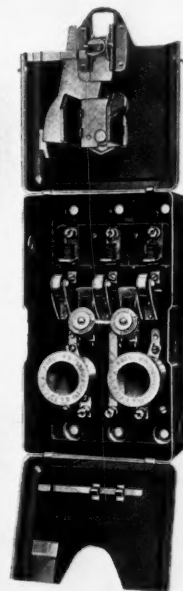
THE CHALLENGE MACHINERY COMPANY, Grand Haven, Michigan, has brought out a new Hempel style Challenge quoin, No. O, of dwarf size, for use where lockup space is limited. This miniature quoin fits in a space $\frac{7}{16}$ inch wide, and a pair, fully expanded, is less than two inches long, thus permitting the use of these quoins at the foot of a 12, $12\frac{1}{2}$, or 13 em newspaper column. Challenge quoins Nos. 1 and 2, of the conventional sizes, have been improved so that they afford greater bearing surface against the form furniture, and the corrugations on the center ribs and slots prevent slippage.

IF YOUR EYE is caught by a black bull's-eye centered with a smashing spot of red or other color on some small-town newspaper you see, do not be too prompt to assume that the job was run twice. Perhaps the publisher is utilizing the invention of D. P. Whittington, of Atlanta, by means of which the color is printed during the black run. The spot of color is placed by means of a type-high felt pad fed from an ink reservoir contained in a brass die. The black encircling the color is printed from a ring which is part of the plate, and this ring, being set on a spring of specified tension, shields the pad from the black-ink roller and yet allows both ring and pad to print respectively black and red at moment of impression. The reservoir contains sufficient ink for about 25,000 impressions, and the pad usually requires replacing after two such runs. The process at present is practicable only for a flat-bed or duplex-web press.

A MOST ATTRACTIVE line of three-tone-surface cover stock has been introduced recently by the Holyoke Card & Paper Company, Springfield, Massachusetts, under the name of Argonaut Cover. Its attractively figured surface is especially appropriate for use with light type faces and line plates. The range of nine colors, from soft to strong, covers a group of pleasing and effective shades. The embossed character of Argonaut Cover qualifies it for the achievement of quality effects with simple treatments, and the Argonaut sample book will suggest many possibilities to the printer in search of distinctive covers.

A NEW and inexpensive alternating-current manual starter, CH-9115, is announced by the Cutler-Hammer Manufacturing Company, Milwaukee,

Wisconsin. Many advantages are available in this carefully designed product. The roller type contacts are of double-break design and cadmium plated; also, the rollers turn following each operation to present a new contact surface, and in every way the starter has been planned to yield the utmost in long and satisfactory service. The mo-



New Cutler-Hammer Starter

tor is completely protected during starting and running periods, thermal overload cutouts are provided, and the starter is as small and compact in construction as is consistent with first-grade performance.

THE SIMPLE, new locking mechanism on the improved models of the Morgan Expansion Roller Trucks has attracted considerable attention, says Park W. Cowan, president of the Morgan Expansion Roller Truck Company. The turn of a nut puts pressure on the rubber tire about which the two parts of the truck are fitted, raising it to the height needed to accord with type height, and the locking device holds the nut tightly in place.

THE CHICAGO PAPER COMPANY is distributing sample sheets of its new and patented Foldwell Coated Bond Split-Color. Contained in the announcement are suggestions for use of this stock to produce a job with white paper on one side and colored on the other, all printed at one time in a single work-and-turn form. Samples of this advantageous new stock may be secured from the Chicago Paper Company at 801 S. Wells street, Chicago.

THE INLAND PRINTER | WANT ADVERTISEMENTS

J. L. FRAZIER, Editor

M. BALDWIN, Associate Editor

Published monthly by

THE INLAND PRINTER COMPANY

632 SHERMAN STREET, CHICAGO, U. S. A.

NEW YORK ADVERTISING OFFICE, 1 EAST 42D STREET

ADDRESS ALL COMMUNICATIONS TO THE INLAND PRINTER

632 SHERMAN STREET, CHICAGO

Vol. 81

MAY, 1928

No. 2

THE INLAND PRINTER is issued promptly on the first of each month. It aims to furnish the latest and most authoritative information on all matters relating to the printing trades and allied industries. Contributions are solicited and prompt remittance made for all acceptable matter.

Members of Audit Bureau of Circulations; Associated Business Papers, Inc.; National Editorial Association; Graphic Arts Association Department of the Associated Advertising Clubs of the World; New York Employing Printers' Association; New York Printers' Supply Salesmen's Guild; Printers' Suppliers' Guild of Chicago; Chicago Association of Commerce; Chicago Business Papers Association.

SUBSCRIPTION RATES

One year, \$4.00; six months, \$2.00; payable always in advance. Sample copies, 40 cents; none free.

SUBSCRIPTIONS may be sent by express, draft, money order or registered letter. Make all remittances payable to The Inland Printer Company.

When Subscriptions Expire the magazine is discontinued unless a renewal is received previous to the publication of the following issue. Subscribers will avoid any delay in the receipt of the first copy of their renewal by remitting promptly.

Foreign Subscriptions.—To Canada, postage prepaid, four dollars and fifty cents; to all countries within the postal union, postage prepaid, five dollars per annum in advance. Make *foreign* money orders payable to The Inland Printer Company. No foreign postage stamps accepted.

IMPORTANT.—Foreign money orders received in the United States do not bear the name of the sender. Foreign subscribers should be careful to send letters of advice at same time remittance is sent, to insure proper credit.

Single copies may be obtained from all news dealers and typefounders throughout the United States and Canada, and subscriptions may be made through the same agencies.

Patrons will confer a favor by sending us the names of responsible news dealers who do not keep it on sale.

ADVERTISING RATES

Furnished on application. The value of THE INLAND PRINTER as an advertising medium is unquestioned. The character of the advertisements now in its columns, and the number of them, tell the whole story. Circulation considered, it is the cheapest trade journal in the United States to advertise in. Advertisements to secure insertion in the issue of any month should reach this office not later than the fifteenth of the month preceding.

In order to protect the interests of purchasers, advertisers of novelties, advertising devices, and all cash-with-order goods are required to satisfy the management of this journal of their intention to fulfil honestly the offers in their advertisements, and to that end samples of the thing or things advertised must accompany the application for advertising space.

THE INLAND PRINTER reserves the right to reject any advertisements for cause.

FOREIGN AGENTS

RAITHBY, LAWRENCE & Co. (Limited), De Montfort Press, Leicester, England.

RAITHBY, LAWRENCE & Co. (Limited), Thanet House, 231 Strand, London, W. C., England.

PENROSE & Co., Farringdon Road, London, E. C., England.

WM. DAWSON & SONS, Cannon House, Brems Buildings, London, E. C., England.

ALEX. COWAN & SONS (Limited), General Agents, Melbourne, Sydney, and Adelaide, Australia.

ALEX. COWAN & SONS (Limited), Wellington, New Zealand.

F. T. WIMBLE & Co., 87 Clarence street, Sydney, N. S. W.

H. CALMELS, 150 Boulevard du Montparnasse, Paris, France.

JOHN DICKINSON & Co. (Limited), Cape Town, Durban, and Johannesburg, South Africa.

A. OUDSHOORN, 23 Avenue de Gravelle, Charenton, France.

Prices for this department: Under heading "Situations Wanted," 60 cents per line; minimum \$1.00. Under all other headings, price 75 cents per line; minimum \$1.50. Count ten words to the line. Address to be counted. Price the same whether one or more insertions are taken. **Cash must accompany order.** The insertion of ads. received in Chicago later than the fifteenth of month preceding publication not guaranteed. We can not send copies of the THE INLAND PRINTER free to classified advertisers. Remit 40 cents additional if copy is desired.

BOOKS AND SYSTEMS

WHY WASTE TIME figuring paper stock by old-fashioned methods when the Printer's Paper Cost Finder does it for you quickly, easily, correctly? Any number sheets, any ream weight, any price per pound; used in 45 states, Canada, Hawaii, Bermuda. Sent on trial. Information free. FITCH BROS., Central City, Nebraska.

"ACHIEVEMENT"—One copy of the American Photo-Engravers' Association masterpiece, "Achievement," for sale; make offer. B 847.

BOOKS AND SYSTEMS for printers and publishers. Complete, illustrated catalog free. PORTE PUBLISHING CO., Salt Lake City, Utah.

BUSINESS OPPORTUNITIES

HIGH-CLASS cylinder 4-color pressman, or all-around compositor and lockup man for P. B. and who is competent to line up and give O. K., or bindery foreman with folding machine and general experience; any one of these three men is desired as a partner of in-a-to-be established printing office and associate himself with a man who really knows the business from "cellar to garret" and who has had 25 years of real hard experience in estimating complete from art work to the delivery; must be willing to get along with very small pay in the start; splendid opportunity. Applicant must have about four or five thousand dollars to invest. Give full details about yourself. B 838.

FOR SALE—Medium-sized printing plant located in one of the most progressive towns in the state of Tennessee; old-established business. BOX 145, Johnson City, Tenn.

LIVE, ESTABLISHED PRINTING SHOP in Chicago loop district for sale; a wonderful opportunity for a practical printer; \$1,000 only, or best offer takes it. B 855.

FOR SALE

MIEHLE PRESSES, all sizes, 26 by 34 to 51 by 74. Tell size needed and ask for special list giving prices and discounts now. **EXCEPTIONAL VALUE**, 49 by 66 Hodgman; this is a fine, late type press; was doing heavy color printing; best distribution for heavy, solid impressions; recommended for any heavy, accurate color printing; publishing work, poster, label cutting and creasing, folding box work, etc. **ALSO** complete line in stock. Special values now in Diamond lever and power cutters, also cut cabinets; offer Automatic cutters, stitchers, punches, jobbers, stones and frames, complete plants and outfits. Write for next bulletin. Come to Chicago and view our large stocks. New, Rebuilt Machinery, Composing-Room Equipment and Supplies. **WANNER MACHINERY CO.**, 714-716 S. Dearborn street, Chicago, Ill.

FOR SALE—Babcock Optimus, 29 by 41 bed, three roller, with Dexter feeder, motor and push button control; Babcock, 33 by 46 bed, four roller, with or without feeder; Babcock No. 11, 45 by 63 bed; two Miehle late style presses, 26 by 34 bed; Miehle 4-0, bed 46 by 62; Seybold Dayton cutter 44 in.; Dexter cutter 50 in.; Seybold Holyoke 38 in. **NORTHERN MACHINE WORKS**, Marshall and Jefferson streets, Philadelphia, Pa.

DEXTER FOLDING MACHINE equipped with Cross feeder, all in fine condition; sheet size 32 by 44 inches, takes all jobbing folds, plus double sixteens and double thirty-twos; complete with motor, \$1,600.00. **THE BURKHARDT CO., INC.**, 545 Larned street, West, Detroit, Mich.

FOR SALE—Four-color rotary printing press taking web of paper 36 inches wide and capable of cutting off various lengths at high speed; excellent distribution; spirally grooved cylinders; immediate delivery; can be inspected; reasonable price. B 841.

FOR SALE—We offer used Kidder roll feed bed and platen and rotary presses of various styles and sizes; your inquiries solicited. **GIBBS-BROWER COMPANY**, 261 Broadway, New York city; 166 West Jackson boulevard, Chicago.

WEEKLY PAPER general job printing plant; community fifteen thousand; established 1857; \$50,000 inventory, gross business \$30,000 plus; sell control or all; fifteen thousand required to swing. B 840.

HARRIS AUTOMATIC printing presses, all models and sizes, single and two-color, rebuilt and guaranteed; prompt delivery, fair prices. **KONECKY BROS.**, 252 Pennsylvania avenue, Brooklyn, N. Y.

BOOKBINDERS' MACHINERY—New model National book sewing machines; also rebuilt machines. Write for particulars. **JOSEPH E. SMYTH CO.**, 727 South Dearborn street, Chicago, Ill.

Megill's Patent SPRING TONGUE GAUGE PINS

Reg. U. S. Pat. Office



QUICK ON. The universally popular Gauge Pin. \$1.80 dozen.

Megill's Gauge Pins for Job Presses

Accurate and uniform. We make a large variety. Insist on Megill's products. Dealers or direct. Circular on request

THE EDWARD L. MEGILL COMPANY

Established 1870

761-763 Atlantic Ave., Brooklyn, N. Y.

Megill's Patent DOUBLE-GRIP GAUGES

Reg. U. S. Pat. Office



WISE GRIP. For any job, heavy stock or long runs. \$2.50 set of 3.

TABLE OF CONTENTS ~ MAY, 1928

	PAGE		PAGE		PAGE
A Distinguished Frontispiece.....	83	PHOTOMECHANICAL METHODS:		PRESSROOM — Continued:	
Amateur Copy	76	Newspaper Review	120	Half-tone on the Platen Press.....	105
An Up-to-Date Printer.....	96	Anaglyphs Invented by Ducois du Hauron	82	Half-tones on Antique Book Paper.....	105
Are Mergers Profitable?.....	111	Chromium-Plated Printing Surfaces.....	82	Imitation Typewritten Letters.....	104
Cause of Workups and Their Remedy, The. 114		Intensifying Dry Film Negatives.....	82	Large Solids on Linen Finish Cover.....	103
Departmental Systematization of the Print- ing Plant	100	More Color Plates Wanted.....	82	Paint and Varnish Color Cards.....	104
EDITORIAL:		Offset Without Water or Blankets.....	82	Preventive of Impression on Reverse of Sheet	104
The Postal Situation.....	113	Planographic Pantone Progress.....	82	Several Ink Problems.....	104
This Scarcely Seems Right.....	113	Rotagrace From Thin Copper Plates..	81	Sheet Heaters and Printing in Register..	104
Effective Lighting Installation in Fresno Newspaper's Plant.....	116	That Overworked Word "Process".....	82	Slur Not on Margins.....	105
Giving the Community Newspaper a Vital Personality	73	Theory of Half-tone, The.....	81	Slur on the Gripper Edge.....	103
Group Printing — Yes or No?.....	70	Tint Plates by New Method.....	81	Special Punched Maps for Reeling.....	105
Growth of a Giant, The.....	101	Wesol Photomechanical Catalog.....	81	Three-Color Print on Half-tone Writing Paper	103
ILLUSTRATIONS:				Utilizing Hard Brayer Roller.....	104
American Art Works, Coschocton, Ohio. 102		Leading Articles in This Issue		Printing and Air Traffic.....	84
Announcement by Graphic Arts Guild....	112	Departmental Systematization of the Printing Plant	100	Printing Industry's Headaches and Some Tested Cures	78
Batavia	98	Effective Lighting Installation in Fresno Newspaper's Plant.....	116	Printing in the Schools.....	69
Black Paper Hood on Lens.....	106	Giving the Community Newspaper a Vital Personality.....	73	Printing Throughout the World.....	97
Clarage Humidifier	127	Group Printing — Yes or No?.....	70	Process Lens and Prism Notes.....	106
Covering Power of Lens.....	106	Karl Klietsch, Inventor of Photo- grature and Rotagrace.....	83	PROOFROOM:	
Covering Power of Prisms With Round and Square Openings.....	107	Lower Costs Come From Better Driving	85	Capitals of Reverence.....	76
Cutler-Hammer Starter, New.....	127	Printing and Air Traffic.....	84	Captious Criticism	76
Hood Prevents Reflections.....	106	Printing Industry's Headaches and Some Tested Cures.....	78	Hendiads and Synonymity, Two Things.....	75
"In the Days That Wuz"—You Couldn't Blame Him	79	Printing in the Schools.....	69	"Lesser"	76
JAVA	99	Printing Throughout the World.....	97	More Apostrophes	75
New Dallas Home of Charles Eneu John- son & Co.....	124	Process Lens and Prism Notes.....	106	Predicate Pronoun	75
Paper Box Hood on Prism.....	106	Protection of Type Faces, The.....	67	Semicolon and Quote.....	76
Reflections Inside Prism.....	106	Scientific Layout of the Printing Plant	109	"Who" or "Whom"?.....	75
Steel Shelving for Cut Storage.....	126	What Constitutes a Lottery?.....	65	Protection of Type Faces, The.....	67
INSERTS:				Scientific Layout of the Printing Plant... 109	
An Exhibition of Advertising on Type and Type Use	96	EDITORIAL	113	The Artist Says —.....	108
"Volendammer"	Frontispiece	MACHINE COMPOSITION	117	TRADE NOTES:	
Karl Klietsch, Inventor of Photograture and Rotagrace	83	NEWSPAPER WORK	120	A. I. G. A. Exhibition of Updike's Work. 123	
Lower Costs Come From Better Driving.. 85		PHOTOMECHANICAL METHODS	81	A Palace for Ink.....	124
MACHINE COMPOSITION:		PRESSROOM	103	Burke, of Macon, Passes Away.....	123
Letter Next to Spaceband Does Not Align Properly	118	PROOFROOM	75	Conference on Printing Education at Car- negie Tech.	124
Oiling the Machine.....	117	SPECIMEN REVIEW	87	Eighty Years Young.....	124
Polishing of Molds.....	117	TRADE NOTES	123	Grant, of Chevrolet Motors, to Address I. A. A.	124
Putting Rosin on the Clutch Buffers Is Bad Business	118	TYPOGRAPHY	93	He's the New Right Bower of the I. P. Editor	123
Should Have a Thermometer.....	117	Contents of previous issues of THE IN- LAND PRINTER can be found by consulting the Industrial Arts Index in your library.		Hogan of Heco Retires.....	125
Sunken Face on Slugs.....	118	POORTRAIT:		Mergenthaler Company in New Chicago Headquarters	125
NEWSPAPER WORK:		Baldwin, Milton F.....	123	National Editorial Association to See Ten- nessee	123
Circulation Audits for Local Papers — Maybe	119	Frederickson, Charles R.....	102	New U. T. A. Estimating Course.....	124
Fade Out "Country Newspaper"; Ap- pear "Local"	119	Hogan, George F.....	125	The Industry at Large.....	125
		Kellogg, Charles W.....	109	What's New This Month.....	126
		PRESSROOM:		TYPOGRAPHY:	
		Blurred Impression	105	Ascenders and Descenders.....	93
		Fast-Drying Typewriter Ink.....	105	What Constitutes a Lottery?.....	65
		Gold Ink.....	105	What Is Your Time Worth?.....	115
		Gold Ink on Varnished Cards.....	104	What's Wrong With the Small-Town News- paper?	80
		Half-tone on Imitation Parchment.....	103	You're Too High.....	118

Published by THE INLAND PRINTER COMPANY

J. L. FRAZIER
Editor

632 Sherman Street, Chicago, Illinois

M. F. BALDWIN
Associate EditorTerms: United States, \$4 a year in advance; single copies, 40 cents. Canada, \$4.50 a year;
single copies, 45 cents. Foreign, \$5 a year; single copies, 50 cents.Entered as second-class matter, June 25, 1885, at the Postoffice at Chicago, Illinois, under Act of March 3, 1879.
Copyright, 1928, by The Inland Printer Company.

Practical BOOKS

about
PRINTING

and the
ALLIED
TRADES

Send for this Catalogue today
IT IS FREE

THE INLAND PRINTER CO.
632 SHERMAN STREET
CHICAGO

Correct Keyboard Fingering By John S. Thompson

A system of fingering the Linotype keyboard for the acquirement of speed in operating. Also contains a few suggestions to the beginner as to the handling of the machine.

PRICE
60c

THE INLAND PRINTER CO.
632 Sherman St., Chicago, Ill.

A Concise Manual of Platen Presswork

A complete treatise covering all the essentials of the theory and practice of Platen Presswork. Thirty-two pages of information for everyday use.

Contents: Bearers; Care of the Press; Distribution; Feeding; General Remarks; Impression; Ink; Overlay; Rollers; Setting the Feed Gages; Special Troubles; Tympan; Underlaying.

Send a quarter today for a copy. You'll get dollars' worth of good from the pamphlet. Also ask for our latest catalogue of books.

THE INLAND PRINTER COMPANY
632 Sherman Street, Chicago, Ill.

A NEW BOOK for Pressmen

Practical Hints on Presswork

By EUGENE ST. JOHN

This book is a compilation of suggestions for assisting the pressman in overcoming many of the problems that arise in his everyday work.

Written in a thoroughly practical manner by a practical pressman, it fills a long-felt need.

It is bound with a flexible cover, in a convenient size, gold-stamped and contains over two hundred pages of helpful material for the pressman.

Price, \$3.00 Postpaid

THE INLAND PRINTER
632 Sherman Street Chicago, Illinois

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912

OF THE INLAND PRINTER, published monthly at Chicago, Illinois, for
April 1, 1928

State of Illinois } ss.
County of Cook }

Before me, a notary public in and for the State and County aforesaid, personally appeared Eldon H. Gleason, who, having been duly sworn according to law, deposes and says that he is the Business Manager of THE INLAND PRINTER, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in Section 411, Postal Laws and Regulations, printed on the reverse side of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business manager are:

Publisher — The Inland Printer Co., Chicago, Ill.
Editor — J. L. Frazier, Chicago, Ill.
Managing Editor — J. L. Frazier, Chicago, Ill.
Business Manager — Eldon H. Gleason, Highland Park, Ill.

2. That the owners are: The Inland Printer Co., 632 Sherman Street, Chicago, Ill.; The MacLean Publishing Co., Ltd., 153 University Avenue, Toronto, Canada; Eldon H. Gleason, 96 County Line Road, Highland Park, Ill.; Walter I. Rogers, 104 Third Street, Wilmette, Ill.; John J. Gage, 232 Fifth Avenue, La Grange, Ill.; Harry Hillman, 507 Washington Avenue, Wilmette, Ill.

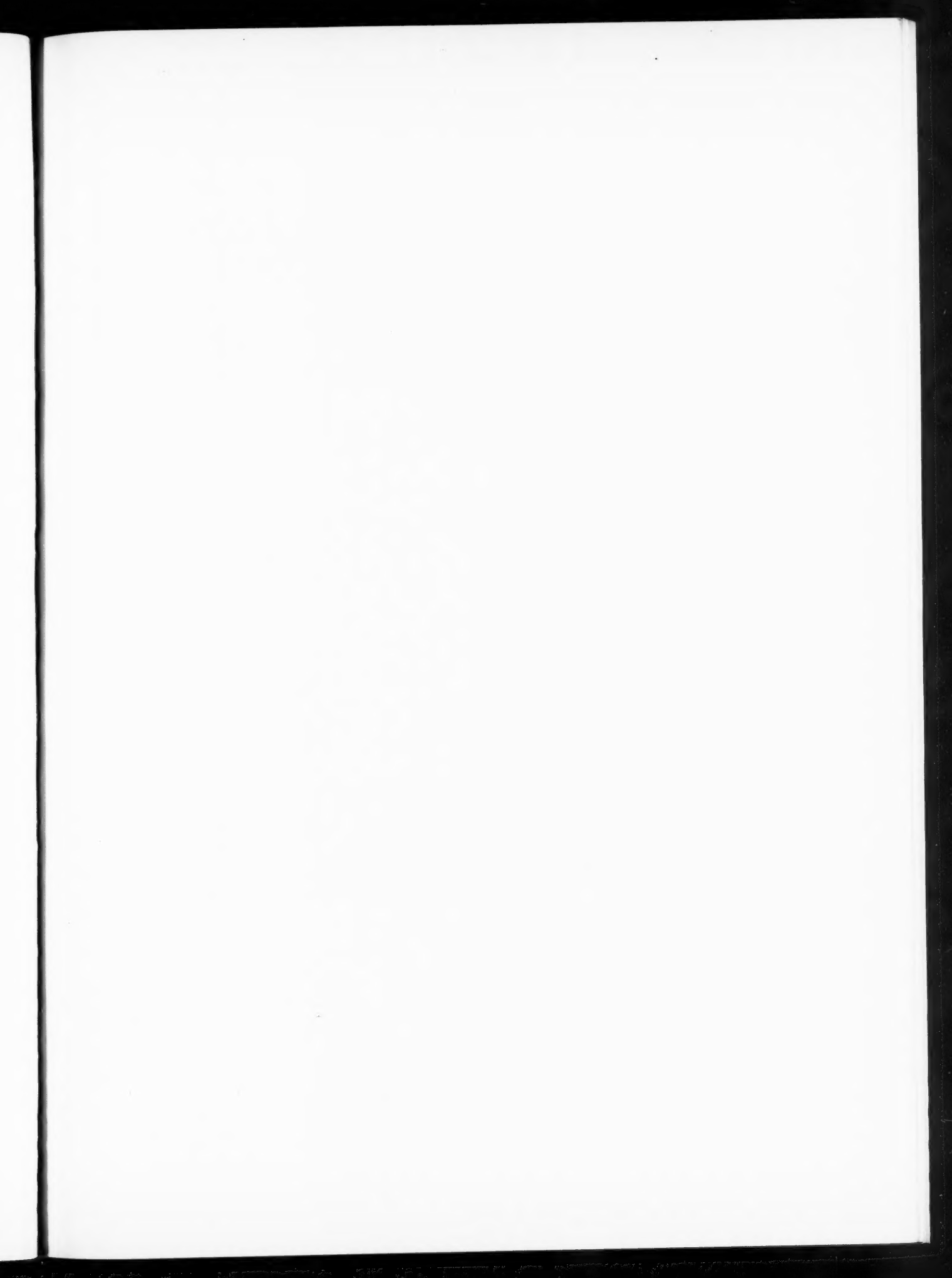
3. That the known bondholders, mortgagees and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages or other securities are: None.

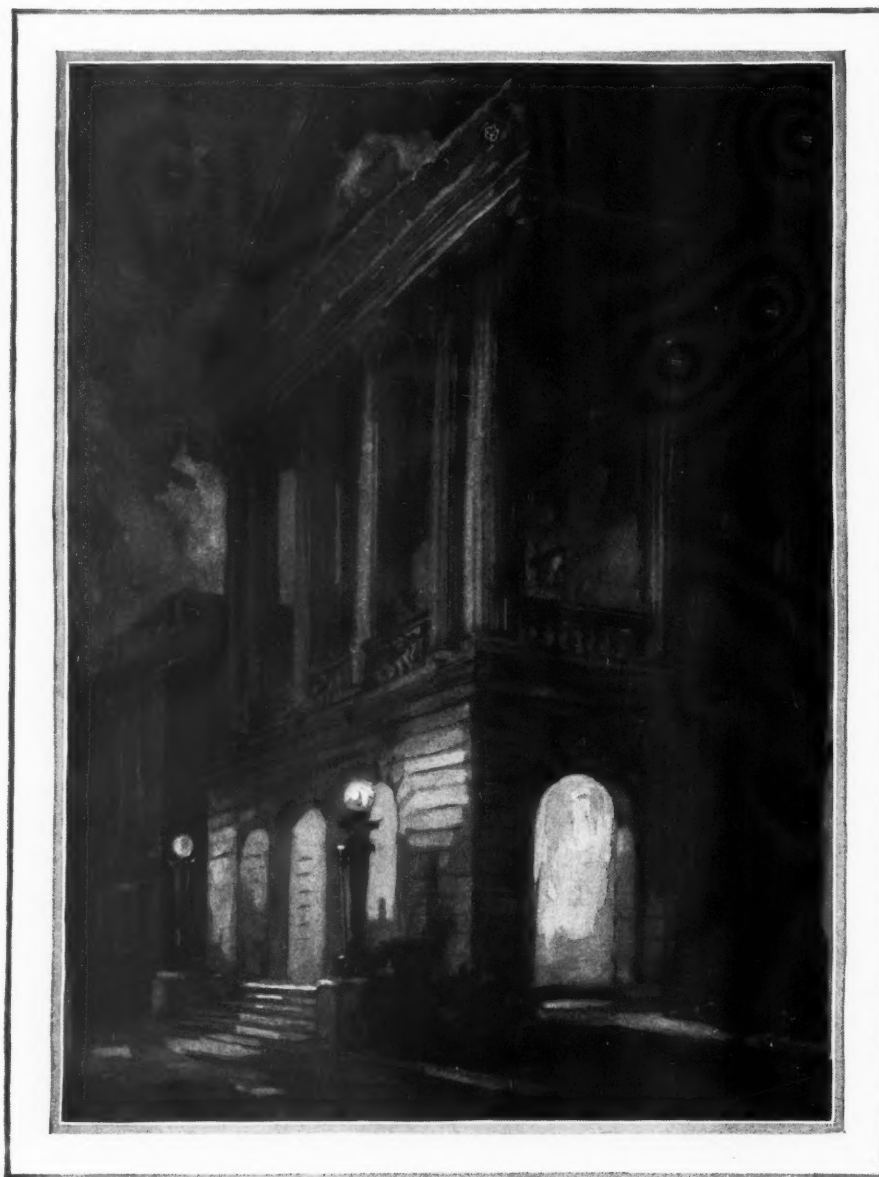
4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company, but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the names of the person or corporation for whom such trustee is acting, is given; also, that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

ELDON H. GLEASON,
Business Manager.

Sworn to and subscribed before me this 29th day of March, 1928.

CHARLES A. LOGAN, Notary Public.
(My commission expires March 15, 1931.)





The Majesty of Intellect

Quality is the keynote of the modern college and university year-book. This page from "The Badger," the University of Wisconsin's annual, impressively symbolizes American reverence for education, and the tinge of orange adds a masterful touch. Produced by the Cantwell Printing Company, of Madison